



# AGENDA

## Environmental Management Commission

May 17, 2021 – 7PM  
Zoom meeting

Click the link below to join the Zoom meeting.

<https://us02web.zoom.us/j/83893622983?pwd=Wng4YXdKU0sxSURyUDYyd2VXUEh6UT09>

Meeting ID: 838 9362 2983

Passcode: 135354

Dial in: 1-312-626-6799 US (Chicago)

Meeting ID: 838 9362 2983

Passcode: 135354

Find your local number: <https://us02web.zoom.us/u/kdXfdk6REV>

### **1. CALL TO ORDER/ROLL CALL**

### **2. PLEDGE OF ALLEGIANCE**

### **3. APPROVAL OF MINUTES**

#### **a. April 19, 2021**

### **4. MANAGEMENT REPORTS**

#### **a. Electric Vehicle (EV)-Ready Community Study**

### **5. ALL OTHER ITEMS**

#### **a. Editorial calendar review**

#### **b. Commissioner updates**

### **6. NEXT MEETING DATE**

#### **a. June 21, 2021**

### **7. ADJOURNMENT**

**The next regular Environmental Management Commission meeting will be held  
June 21, 2021 @ 7PM via Zoom.**

**REGULAR MEETING  
OAKDALE ENVIRONMENTAL MANAGEMENT COMMISSION  
APRIL 19, 2021**

**CALL TO ORDER**

The Oakdale Environmental Management Commission (EMC) held a virtual meeting on Monday, April 19, 2021. The meeting began at 7:05PM with the Pledge of Allegiance.

**CALL OF ROLL**

On a call of roll, the following were present:

Chairperson: Keith Miller, Chairperson

Commissioners: Noah Gerding, Vice Chair  
Connor Brown  
Gretel Fink  
Bonnie Wilson

Absent: Nick Kantola  
Karen Jackson

Also Present: Shannon Reidlinger, Sr. Community Development Specialist  
Kevin Zabel, City Council Liaison

Quorum Present: YES  NO

**APPROVAL OF MINUTES**

**COMMISSIONER GERDING MADE A MOTION, SECONDED BY COMMISSIONER WILSON, TO APPROVE THE MINUTES OF THE REGULAR MEETING OF MARCH 15, 2021, WITH CORRECTIONS AS FOLLOWS: PAGE 2, BOTTOM OF PAGE, MEDIA~~L~~ TO MEDIA.**

**VOTED IN FAVOR:**

COMMISSIONER BROWN	AYE
COMMISSIONER FINK	AYE
COMMISSIONER GERDING	AYE
COMMISSIONER WILSON	AYE
CHAIR MILLER	AYE

**5 AYES**

**MANAGEMENT REPORTS**

**a. GreenStep Cities metrics**

Ms. Reidlinger shared a PowerPoint presentation on Annual GreenStep Cities reporting summary.

The City of Oakdale was awarded Step 5 designation with the Minnesota GreenStep Cities program. To maintain this designation the City was required to document and demonstrate improvement on GreenStep metrics

Metric category #1: City Buildings and Lighting

- The percentage in street lights owned by the City increased from 23% to 41.2%.
- Energy consumption/dollars spent in City buildings went down in 2020.

Metric category #11: Waste Water

- The ratio of Inflow and Infiltration volume to total volume entering the wastewater collection system was 1% in 2020, down from 1.19% in 2019.

Metric category #14: Renewable Energy

- According to Xcel Energy's 2019 community report for Oakdale, 122 businesses/residences were Solar Garden customers, 459 businesses/residences participated in the Windsource program, and 21 businesses/residences participated in the Renewable\*Connect program.
- Well over half of the energy used for City operations was generated and purchased renewable energy.

Ms. Reidlinger shared that she believes we were able to produce enough data to retain our Step 5 Designation.

In response to a question from Commissioner Wilson, Ms. Reidlinger noted she will reach out to the Communications Specialist and discuss either more signage or Social Media Posts sharing how well Oakdale is doing on this initiative.

#### **b. Multi-family dwelling recycling opportunity assessment**

Ms. Reidlinger shared this discussion would be grounded in the Comprehensive plan. Chapter 8, Goal 1, Policy 7 talks about promoting options and opportunities in recycling for the City. The 2021 Work Plan also makes this a priority for the EMC. This opportunity assessment will focus on multi-family dwellings, and will be broken down into three phases:

##### **1. Phase One: Evaluate current conditions and identify opportunities for improvement.**

The goal of Phase one was that the EMC has a good understanding of what is currently happening when it comes to recycling in multi-family dwellings.

##### **2. Phase Two: Create actionable goals and a policy to achieve those goals.**

After a good understanding of current habits from Phase One, drafted goals will be developed and discussed to identify objectives and generate policy recommendations.

**3. Phase Three: Implement developed policy and monitor effectiveness.**

The policy that has been created from Phase Two on multi-family recycling has been implemented and then tracked.

In response to a question from Commissioner Wilson, Ms. Reidlinger explained in Chapter 6 of the Ordinances, multi-family dwellings are defined as having five or more units. They are not townhomes nor Condominiums.

**OTHER ITEMS**

**a. Editorial Calendar review**

The Commission discussed the monthly updates to the Editorial Calendar.

**b. Commissioner updates:**

**i. Solar Twin Cities update from Chair Miller**

Chair Miller noted that the first Solar Twin Cities meeting will be held April 21, 2021. He will provide updates.

**ii. Single Use Plastics Project from Commissioner Gerding**

Commissioner Gerding provided updates on the single use plastics project.

**iii. Green Corps Introductions from Commissioner Gerding**

Commissioner Gerding introduced Green Corps, a program where members were given a housing allowance and health care benefits. The host organization provided 0.08 FTE and office expenses of computer, email and other administrative infrastructure. This is an in-kind contribution for the host organization. The members work in four key areas:

- Reducing air pollutants
- Green infrastructure investments or improvements
- Waste reduction via recycling and organics
- Community Outreach

The investment asked of the host organization totals \$5,500.00 with 11 months of service.

**CITY COUNCIL UPDATE**

Council Member Kevin Zabel shared his updates by noting that it was a busy season for the City with parks cleaning, street improvements, and mentioned that the City was awarded a grant from the MPCA to build a new temporary water treatment facility at Well 7 at no cost to the residents.

**NEXT MEETING DATE**

Chair Miller reminded the Commission the next meeting would be Monday, May 17, 2021.

**ADJOURNMENT**

**A MOTION WAS MADE BY COMMISSIONER FINK, SECONDED BY COMMISSIONER GERDING, TO ADJOURN THE APRIL 19, 2021 REGULAR MEETING OF THE OAKDALE ENVIRONMENTAL COMMISSION AT 8:03 P.M.**

COMMISSIONER BROWN	AYE
COMMISSIONER GERDING	AYE
COMMISSIONER FINK	AYE
COMMISSIONER WILSON	AYE
CHAIR MILLER	AYE

**5 AYES.**

Respectfully submitted,

Jackie Knutson  
Recording Secretary

**TO: Environmental Management Commission**  
**FROM: Shannon Reidlinger**  
**DATE: May 14, 2021**  
**SUBJ: Electric Vehicle (EV)-Ready Community Study**

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This memorandum summarizes recommendations that the City of Oakdale can implement to become an EV-ready community.

### **Context**

Greenhouse gases (GHGs), like the carbon dioxide released when vehicles burn gasoline, trap heat in the atmosphere and cause climate change. The transportation sector in particular is a significant producer of GHG emissions in Minnesota and accounted for 25% of total emissions in the state in 2018. Locally, vehicles traveling within Oakdale's city boundaries emitted roughly 122,000 tonnes of greenhouse gases into the environment in 2018. Limiting the progression of climate change caused by the transportation sector requires mitigation efforts to reduce GHG emissions; widespread use of electric vehicles (EVs) by homeowners and businesses represents one such mitigation strategy.

Electric vehicles are recognized by Oakdale's 2040 Comprehensive Plan as an important method to mitigate the impact of climate change in the community; specifically, Chapter Eight, Goal One, Section Six calls on the City to "support private and public infrastructure that accommodates and encourages use of electric and autonomous vehicles and explore options for City fleet use of EVs". Expanding access to EVs in Oakdale is a climate change mitigation strategy with precedent in international, national, and state emission reduction policy objectives.

### **Current and projected availability of electric vehicles and charging infrastructure**

Responding to GHG emission reduction mandates, automobile manufacturers increasingly provide hybrid and all-electric versions of current model vehicles as well as new, battery-operated models. As the electric vehicle market widens, battery technology progresses, and the network of public and private charging stations expands, Americans are well positioned to transition to widespread use of EVs and electric vehicles are predicted to account for 27% of total new car sales in the U.S. by 2030.

In the face of market growth, current adoption of electric vehicles in Oakdale and the surrounding community is steadily increasing. Electric vehicle registrations in ZIP code 55128 doubled from 29 to 57 registered EVs between 2018 and 2020. In Washington County, electric vehicle registrations increased 33% from 680 to 906 registered EVs between 2019 and 2020. In conjunction with more varied automotive offerings, the proliferation of charging station infrastructure in the Twin Cities region – with 646 Level 2 and 73 direct current fast charging (DCFC) ports publicly available to EV drivers today – signals growing adoption of electric vehicles in Oakdale and surrounding communities.

### **The City's role in facilitating EV-readiness**

As electric vehicle offerings broaden and the number of stations in the regional charging network multiply, the City of Oakdale is uniquely positioned to facilitate EV readiness by proactively encouraging the usage of EVs now and in the future. Oakdale supports private and

public electric vehicle infrastructure through four areas of action, as outlined by Drive Electric Minnesota: zoning and subdivision ordinances, administration, programs, and City fleet EVs.

Staff recommends that the Environmental Management Commission support further evaluation and implementation of the below-described EV-ready actions in 2021, 2022, and 2023.

EV-ready action category	Action	Description
Zoning and subdivision ordinances	Land use	Allow EV charging stations as a permitted land use.
	Design and construction	Establish standards for installing charging infrastructure to support public, commercial, and multi-family electric vehicle supply equipment (EVSE).
		Establish standards for signage and safety of EVSE.
	EV parking standards	Establish design and location standards, as well as protections, for electric vehicle parking spaces.
		Establish EV parking capacity and minimum parking requirements.
	ROW permitting	Develop permit for Public Right-of-Way charging.
Administration	Installation guidelines	Provide education to businesses, developers, homeowners, and electrical contractors about EVSE installation guidelines.
	Online permitting	Create an online process for EVSE permitting.
Programs	Planned Unit Development	Include amenity points for EVSE and/or include EVSE as a condition of design approval.
	Sustainable building policy	Require a set number or percentage of parking to have electric charging in accordance with sustainable building rating best practices.
	City financing for EVSE	Add EV charging infrastructure and equipment as eligible parking lot improvement expenses under the BRLF loan program.
		Add EV charging infrastructure and equipment as eligible energy improvement expenses under the HIA loan program.
	Utility rebates	Promote Xcel Energy rebates for EVSE installation.
City fleet EVs	FleetCarma study	Conduct a study with FleetCarma to identify opportunities to replace ICE vehicles in Oakdale's fleet with an electric vehicle.

**TO: Environmental Management Commission**  
**FROM: Shannon Reidlinger**  
**DATE: May 14, 2021**  
**SUBJ: Editorial calendar review**

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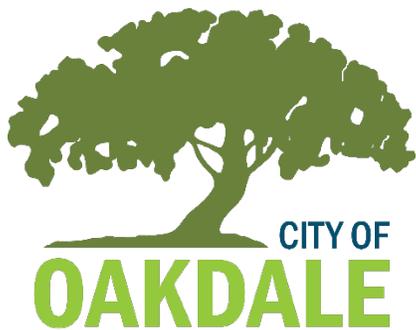
The EMC Editorial Calendar is designed to generate public outreach and communication about the Commission’s priorities related to solid waste, recycling, composting, air and water quality, and energy conservation. Topics of interest, dates of note, and relevant community resources may vary as the calendar is refined and updated; consequently, the EMC shall provide a recommendation to staff on the messages and resources of highest importance month-to-month.

This memorandum seeks to open discussion on the message and resources of focus in May and June of 2021.

<b>2021 EMC Editorial Calendar</b>	
<b>May – Bicycling and Transportation</b>	
<b>Dates related to monthly topic</b>	<b>Resources related to monthly topic</b>
<i>Bike to Work Day – third Friday</i>	<ul style="list-style-type: none"> <li>• Bicycle safety &amp; education</li> <li>• Electric Vehicles</li> </ul>
<i>National Bike to Work Week</i>	
<i>National Bike Month</i>	
<b>June – Active Lifestyles</b>	
<b>Dates related to monthly topic</b>	<b>Resources related to monthly topic</b>
<i>Landscape Revival Native Plant Expo &amp; Market</i>	<ul style="list-style-type: none"> <li>• Promote city parks &amp; trails</li> <li>• Adopt a Park</li> <li>• Oakdale Community Walk</li> </ul>
<i>World Bicycle Day – June 3</i>	
<i>World Environmental Day – June 5</i>	
<i>National Trails Day – June 5</i>	

**2021**

**EV-READY COMMUNITY STUDY**



**Shannon Reidlinger**

**City of Oakdale**

**5/17/2021**

## BACKGROUND

### Problem Statement

Greenhouse gases (GHGs), like the carbon dioxide released when vehicles burn gasoline, trap heat in the atmosphere. According to the US Environmental Protection Agency <sup>1</sup>, atmospheric heat retention negatively impacts communities and the climate by:

- Increasing health-related illnesses and deaths associated with air pollution
- Reducing crop yields as a result of more severe heat waves, floods, and droughts
- Eroding coastal environments and eliminating wetlands due to rising sea level
- Transforming ecosystems by impacting where species live

While climate change is influenced by many types of emission-generating activities, the transportation sector in particular is a significant producer of GHG emissions in Minnesota. Although overall transportation-related emissions have decreased since 2005, the transportation sector nevertheless accounted for 25% of total GHG emissions in the state in 2018, producing more emissions that year than electricity generation (24.9%) and agriculture, forestry, and land use activities (24%). Within the transportation sector, passenger vehicles and light-duty trucks accounted for 58% of GHG emissions in Minnesota <sup>2</sup>. Locally, vehicles traveling within Oakdale's city boundaries emitted roughly 122,000 tonnes of greenhouse gases into the environment in 2018 <sup>3</sup>.

Slowing the progression of climate change caused by the transportation sector requires mitigation efforts to reduce GHG emissions. Widespread use of electric vehicles (EVs) by homeowners and businesses represents one such mitigation strategy.

## TRANSITION TO ELECTRIC VEHICLES

Electric vehicles are recognized by Oakdale's 2040 Comprehensive Plan as an important method to mitigate the impact of climate change in the community; specifically, Chapter Eight, Goal One, Section Six calls on the City to "support private and public infrastructure that accommodates and encourages use of electric and autonomous vehicles and explore options for City fleet use of EVs". Expanding access to EVs in Oakdale is a climate change mitigation strategy with precedent in:

- *State policy.* In Minnesota, the Next Generation Energy Act sets statutory goals for reducing statewide GHG emissions 30% below 2005 levels by 2025, and 80% by 2050 <sup>4</sup>. To help realize this target, a 2019 zero-emission vehicle rule requires manufacturers to make more battery electric and plug-in hybrid vehicles available for sale in Minnesota <sup>5</sup>.
- *National policy.* The United States has targeted a goal of reducing emissions 50-52% below 2005 levels by 2030, and federal policy names automotive workers building electric cars, trucks, and buses, and skilled workers installing charging stations to accommodate electric vehicles, as integral to climate change mitigation <sup>6</sup>. To meet national emission reduction goals, U.S. cities including Honolulu, Los Angeles, Santa Monica, Seattle, and West Hollywood have proposed policies including transitioning to electric buses by 2025 and banning new sales of internal combustion engine (ICE) vehicles by 2030 <sup>7</sup>.
- *International policy.* At least 23 countries and 45 cities and territories have established policy objectives to support a transition to electric vehicles over the next several decades in order to achieve emission reduction targets <sup>7</sup>.

<sup>1</sup> U.S. Environmental Protection Agency (n.d.). [Report on the environment: greenhouse gases.](#)

<sup>2</sup> Minnesota Pollution Control Agency (n.d.). [2018 sector source of GHG emissions and storage](#) [data set].

<sup>3</sup> Regional Indicators Initiative (n.d.). [Greenhouse gas emissions: City of Oakdale](#) [data set].

<sup>4</sup> Minn. Stat. § [216H.02](#) (2020).

<sup>5</sup> Kraker, D. (2021, May 7). [State judge OKs 'clean cars' plan.](#) MPR News.

<sup>6</sup> The White House (2021, April 22). [Fact sheet: President Biden sets 2030 greenhouse gas pollution reduction target aimed at creating good-paying union jobs and securing U.S. leadership on clean energy technologies.](#)

<sup>7</sup> Burch, I., & Gilchrist, J. (2020). [Survey of global activity to phase out internal combustion engine vehicles.](#)

### **Current and projected availability of electric vehicles and charging infrastructure**

In response to GHG emission reduction policy mandates, automobile manufacturers increasingly offer hybrid and all-electric versions of current model vehicles as well as entirely new, battery-operated models <sup>8</sup>. In particular, mainstream manufacturers including Ford, Nissan, Toyota, and Volkswagen are leading the charge to expand the variety of affordable electric vehicles available to consumers over the next decade <sup>7</sup>. Additional manufacturers have announced a commitment to eliminate internal combustion engine (ICE) powertrains entirely from their fleet of offerings in favor of battery-operated models. General Motors, for example, aims to sell only vehicles that have zero tailpipe emissions by 2035 <sup>9</sup>; Jaguar intends to offer fully-electric vehicles only starting in 2025 <sup>10</sup>; and Volvo plans to convert its entire lineup to battery power and cease sales of ICE vehicles by 2030 <sup>11</sup>.

As the electric vehicle market widens, battery technology progresses, and the network of public and private charging stations expands, Americans are well positioned to transition to widespread use of EVs. Bloomberg New Energy Foundation suggests in its 2020 electric vehicle outlook that U.S. households – many of which have two or more cars and the capacity to install home charging – are “ideal adopters [of electric vehicles] as EV economics, range and recharging options continue to improve” <sup>12</sup>. In line with optimism about EV adoption, a 2019 report of prospective car buyers in Minnesota found 59% had some interest in purchasing an electric vehicles in 2019, with 30% saying they would consider buying one in the next two years <sup>13</sup>. Nationally, electric vehicles are predicted to account for 27% of total new car sales in the United States by 2030. Globally, sales of EVs are forecast to experience a 29% compound annual growth rate in the next ten years, with EVs representing a projected 32% of total global new car sales by 2030 <sup>14</sup>.

### **Electric vehicle registrations in Oakdale and the greater Twin Cities region**

In the face of current market growth, adoption of electric vehicles in Oakdale and the surrounding community has steadily increased. Between 2018 and 2020, electric vehicle registrations in ZIP code 55128 doubled from 29 to 57 registered EVs. Together with the five ZIP codes directly adjacent to the City, electric vehicle registrations in Oakdale and its immediate neighboring cities increased 122% from 198 to 439 registered EVs between 2018 and 2020. More broadly, electric vehicle registrations in Washington County increased 33% from 680 to 906 registered EVs between 2019 and 2020 <sup>15</sup>.

In conjunction with more varied automotive offerings, the proliferation of charging station infrastructure in the Twin Cities region signals growing adoption of electric vehicles in Oakdale and surrounding communities. According to the Alternative Fuels Data Center, there are 205 publicly-available charging destination offering 646 Level 2 and 73 direct current fast charging (DCFC) ports in the seven county Twin Cities metro region today <sup>16</sup>. The Hy-Vee in Oakdale accounts for one of these publicly-available charging destinations and provides four Level 2 and eight DCFC ports. As illustrated in the following image, charging station destinations are currently located where drivers may willingly spend half an hour or more charging their electric vehicle.

<sup>8</sup> White, A. (2021, February 20). [Here are all the promises automakers have made about electric cars](#). *Car and Driver*.

<sup>9</sup> Boudette, N.E. & Davenport, C. (2021, January 28). [G.M. will sell only zero-emission vehicles by 2035](#). *The New York Times*.

<sup>10</sup> Philip, S.V. (2021, February 15). [Jaguar’s electric shift may leave U.K. plant with no car to make](#). *Bloomberg*.

<sup>11</sup> Ewing, J. (2021, March 2). [Volvo plans to sell only electric cars by 2030](#). *The New York Times*.

<sup>12</sup> McKerracher, C., Izadi-Najafabadi, A., O’Donovan, A., Albanese, N., Soulopolous, N., Doherty, D., Boers, M., Fisher, R., Cantor, C., Frith, J., Mi, S., Grant, A., Zamorano-Cavidad, A., Abraham, A.T., Ampofo, K., Kou, N., Edmonds, W., Berryman, I., Landess, J., & Lyu, J. (2020). [Electric vehicle outlook 2020](#). BloombergNEF.

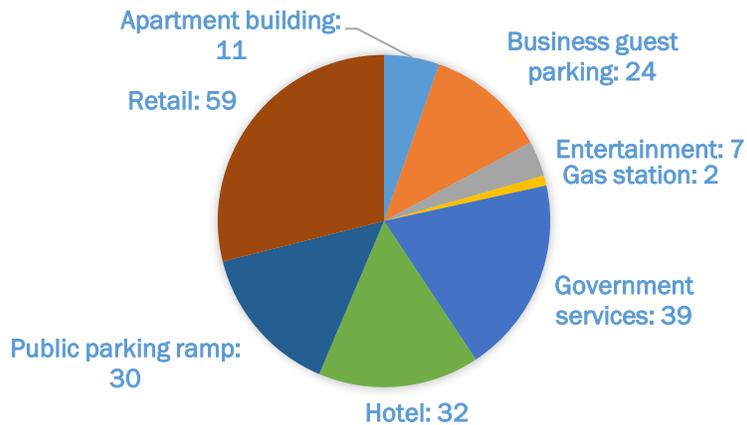
<sup>13</sup> Union of Concerned Scientists and Consumer Reports (2019). [Electric vehicle survey findings and methodology: Minnesota](#).

<sup>14</sup> Woodward, M., Bryn, W., Hamilton, J., Alberts, G., Fullerton-Smith, S., Day, E., & Ringrow, J. (2020). [Electric vehicles: Setting a course for 2030](#). Deloitte.

<sup>15</sup> Great Plains Institute (n.d.). [MN EV registration](#) [map].

<sup>16</sup> Alternative Fuels Data Center (n.d.). [Electric vehicle charging station locations](#) [dataset].

### TWIN CITIES REGION PUBLIC EV CHARGING DESTINATIONS BY TYPE AND NUMBER



As electric vehicle offerings broaden and the number of stations in the regional charging network multiply, Oakdale can facilitate EV readiness by implementing actions that encourage the usage of EVs now and in the future.

### BECOMING AN EV-READY COMMUNITY

#### The City's role

The City of Oakdale is uniquely positioned to support private and public infrastructure that accommodates and encourages the use of electric vehicles in the community. As outlined by Drive Electric Minnesota <sup>17</sup>, municipalities play a key role in encouraging the growth of electric vehicle infrastructure through five principles:

1. *Policy.* The City acknowledges EV benefits and supports development of charging infrastructure in its Comprehensive Plan.
2. *Zoning and subdivision ordinances.* The City implements development standards and regulations that enable EV use.
3. *Administration.* The City creates transparent and predictable processes for permitting EV infrastructure.
4. *Programs.* The City overcomes market barriers that limit the growth of EV infrastructure through specialized programs.
5. *City fleet EVs.* The City demonstrates EV viability in public fleets and facilities.

#### Community-based policy priorities

Oakdale accomplished the first step towards becoming an EV-ready community by incorporating language regarding electric vehicles and charging infrastructure in Chapter Eight, Goal One, Policy Six of the 2040 Comprehensive Plan. Prioritizing community-based policies regarding zoning and subdivision ordinances, administration, and program implementation continues the city's progress towards EV readiness.

#### EV-ready action: Zoning and subdivision ordinances

The City of Oakdale builds a foundation for EV readiness by adopting ordinances that support the use of EVs and incorporate electric vehicle supply equipment (EVSE) in development and redevelopment <sup>17</sup>.

<sup>17</sup> Ross, B., & Bocklund, K. (2017, November 30). [Making your city "EV-ready"](#). Great Plains Institute.

The following table summarizes EV-ready ordinance recommendations based upon nationwide best practices and peer city examples compiled by the Great Plains Institute <sup>18</sup>. Electric vehicle ordinances enacted in Duluth, Golden Valley, Saint Paul, and St. Louis Park may serve as examples for zoning and subdivision amendments implemented in Oakdale.

REGULATION		
Action	Description	Purpose
Land use	Allow EV charging stations as a permitted land use	To streamline the installation of infrastructure that serves a public purpose
Design and construction	Establish standards for installing charging infrastructure to support public, commercial, and multi-family electric vehicle supply equipment (EVSE)	To prepare for future installation of chargers at the time of construction, and facilitate a smooth construction permitting process
	Establish standards for signage and safety of EVSE	To help all drivers understand appropriate use of EV parking infrastructure, and enhance the public value of EVSE
EV parking standards	Establish design and location standards, as well as protections, for electric vehicle parking spaces	To provide information related to EVSE installation cost and location, and protect the public benefit being provided to EV drivers
	Establish EV parking capacity and minimum parking requirements	To capture the public value in EVSE
ROW permitting	Develop permit for Public Right-of-Way charging	To encourage EV ownership by facilitating accessible charging installation

#### EV-ready action: Administration

The City of Oakdale facilitates a smooth transition towards electric vehicles and corresponding infrastructure by standardizing the permitting processes so that contractors and City staff know what is required to install EVSE <sup>17</sup>. The following table summarizes EV-ready administration recommendations based upon residential EVSE permit process best practices <sup>19</sup>.

ADMINISTRATION		
Action	Description	Purpose
Installation guidelines	Provide education to businesses, developers, homeowners, and electrical contractors about EVSE installation guidelines	To streamline the permitting and inspection process by clarifying requirements
Online permitting	Create an online process for EVSE permitting	To make EVSE permitting cheaper, faster, and simpler for businesses, developers, homeowners, and electrical contractors

#### EV-ready action: Programs

The City of Oakdale encourages EVSE in development and public spaces by removing barriers to EV ownership and charging infrastructure installation.

The following table summarized EV-ready program concepts based upon nationwide best practices

<sup>18</sup> Ross, B., & Cooke, C. (2019). [Summary of best practices in electric vehicle ordinances](#). Great Plains Institute.

<sup>19</sup> Energetics Incorporated (2013). [Residential EVSE permit process best practices](#).

and peer city examples compiled by Drive Electric Minnesota <sup>17</sup>. Programs incentivizing electric vehicle ownership and EVSE installation in Golden Valley, Edina, Red Wing, and Saint Paul may serve as a framework for implementing electric vehicle incentives in Oakdale.

INCENTIVIZING PROGRAMS		
Action	Description	Purpose
Planned Unit Development	Include amenity points for EVSE and/or include EVSE as a condition of design approval	To encourage EVSE installation requirements in mixed-use development
Sustainable building policy	Require a set number or percentage of parking to have electric charging in accordance with sustainable building rating best practices	To encourage EVSE installation requirements in large commercial development
City financing for EVSE	Add EV charging infrastructure and equipment as eligible parking lot improvement expenses under the BRLF loan program	To support EVSE at local businesses
	Add EV charging infrastructure and equipment as eligible energy improvement expenses under the HIA loan program	To support EVSE in multi-family and townhome developments
Public-private partnership	Provide joint funding of EVSE installation through a public-private partnership	To encourage community investment in the transition to electric vehicles and support EVSE at local businesses
Bulk buy	Promote participation in EV bulk buy programs, when available	To incentivize dealers to market and carry EVs in Minnesota, and make EVs a more affordable option for businesses and residents
Utility rebates	Promote Xcel Energy rebates for EVSE installation	To encourage EVSE in business, commercial, and residential settings

In addition to establishing and promoting incentivizing programs, the City encourages use of electric vehicles by installing public chargers at public buildings or in public spaces. The following table summarizes selection criteria for charging station installation as recommended by Drive Electric Minnesota, and examples of locations in Oakdale that match those criteria <sup>20</sup>.

Selection criteria	Definition	Example preferred locations in Oakdale	
Proximity to a high-volume road or highway	All Principle Arterial, A-Minor Augmenter, and A-Minor Expander roads in Oakdale are considered high-volume. Major Collector roads with > 6,500 AADT, and A-Minor Reliever roads with > 13,375 AADT, are considered high-volume roads	Principle Arterial	Near the interchange of I-694 and Highway 36
		Major Collector	<ul style="list-style-type: none"> <li>• Hadley Ave N between 34<sup>th</sup> St N &amp; 30<sup>th</sup> St N</li> <li>• Hadley Ave N between 11<sup>th</sup> St N &amp; 10<sup>th</sup> St N</li> </ul>
		A-Minor Reliever	<ul style="list-style-type: none"> <li>• 10<sup>th</sup> St N between Hadley Ave N &amp; [11<sup>th</sup> St N]</li> <li>• 10<sup>th</sup> St N between [11<sup>th</sup> St N &amp; Helmo Ave N]</li> <li>• Geneva Ave N between Conway Ave &amp; Hudson Blvd</li> </ul>

<sup>20</sup> Drive Electric Minnesota (2018). [Site selection guidelines](#).

		A-Minor Augmenter	34 <sup>th</sup> St N between Geneva Ave N & I-694
		A-Minor Expander	34 <sup>th</sup> St N between I-694 & Ideal Ave N
Proximity to amenities	'Proximity' is defined as < .5 miles; an amenity is defined as a location where people will spend 2 - 4 hours	Parks	The Oakdale Nature Preserve is an ideal location for public charging; other Oakdale parks with significant public amenities may also be considered
		Government services	<ul style="list-style-type: none"> <li>• City Hall (public and/or fleet charging)</li> <li>• Oakdale library</li> <li>• Discovery Center</li> </ul>
Proximity to amenities	'Proximity' is defined as < .5 miles; an amenity is defined as a location where people will spend 2 - 4 hours	Entertainment venues	<ul style="list-style-type: none"> <li>• Marcus Oakdale Center</li> <li>• Oak Marsh Golf Course</li> <li>• Inwood Oaks</li> <li>• Sky Zone</li> <li>• Pinz</li> </ul>
		Hotels	<ul style="list-style-type: none"> <li>• Best Western Regency Plaza</li> <li>• Hampton Inn &amp; Suites</li> <li>• Hilton Garden Inn</li> </ul>
		Retail centers	Areas zoned Community Commercial or Neighborhood Commercial
Proximity to public parking and/or public transit	'Proximity' is defined as < .5 miles	Park & Ride parking lot	<ul style="list-style-type: none"> <li>• Intersection of Hadley Ave N &amp; Upper 17<sup>th</sup> St N</li> <li>• 4<sup>th</sup> St N at Guardian Angel's Church</li> </ul>
		Public parking lots	<ul style="list-style-type: none"> <li>• Gateway State Trail parking lot (not City owned)</li> <li>• Parking lots at City Hall, City parks</li> </ul>
Partnership with major employers and/or businesses	Major employers in Oakdale are considered those with the highest number of on-site employees	Top 10 largest employers (by employee count)	<ul style="list-style-type: none"> <li>• North Tartan Girls Basketball</li> <li>• First Student Charter</li> <li>• Canvas Health</li> <li>• Twin City Hardware</li> <li>• First Student Home to School</li> <li>• Hy-Vee</li> <li>• TCH Central</li> <li>• Pinz</li> <li>• Target</li> <li>• Pace Analytical Services LLC</li> </ul>
		Locations for employment growth	See future employment locations and intensity table (p. 15) in the 2040 Comprehensive Plan

Proximity to development / redevelopment projects	'Proximity' is defined as < .5 miles	New Development	3M Property (mixed use residential)
		Redevelopment: mixed use	<ul style="list-style-type: none"> <li>• 1267 Geneva Ave N</li> <li>• 253 Geneva Ave N</li> <li>• 6944 Hudson Blvd N</li> </ul>
		Redevelopment: high density residential	7515 10 <sup>th</sup> St N
		Redevelopment: bus rapid transit oriented development	Helmo Station

Additional charging station site selection criteria to consider include:

- *Public vs. private lot ownership.* A charging station is much easier to install and maintain when located in a community-owned lot.
- *Lot size.* EV charging stations take up a smaller overall percentage of parking spaces in larger lots.
- *Charging station coverage.* A covered area protects charging stations and EV drivers from seasonal weather and can increase feelings of safety.
- *Installation costs.* Level 2 charging stations mounted on a wall or freestanding on a non-concrete surface, and DCFCs located near an existing transformer, are less costly to install.

Options for charging station installation will be evaluated as ideal charging destinations in Oakdale are identified.

### Operations-based policy priorities

#### EV-ready action: City fleet EVs

The City of Oakdale encourages adoption of electric vehicles by residents and businesses and demonstrates the market readiness of EVs by incorporating electric vehicles into its fleet <sup>17</sup>. Opportunities to transition any portion of the City's fleet to electric vehicle(s) are assessed by companies like FleetCarma. After installing a telematics device to track vehicle usage statistics like idle time, acceleration patterns, and daily miles driven, FleetCarma provides a report about which fleet vehicles are best fit to be replaced with electric vehicles based on the total cost of ownership savings of over the life of the vehicle. Peer cities that have conducted a fleet analysis through FleetCarma include Bloomington, Faribault, Fridley, Hastings, Inver Grove Heights, St. Louis Park, White Bear Lake, Winona, and Woodbury; these assessments revealed that vehicles driven the most miles, those that take many short trips, and those that idle a lot are prime candidates for replacement with an electric vehicle <sup>21</sup>.

Options for charging station installation will be evaluated if vehicles within Oakdale's fleet are identified to be replaced with an EV.

### RECOMMENDATIONS FOR IMPLEMENTATION

Staff recommends that the Environmental Management Commission support further evaluation and implementation of the below-described EV-ready actions in 2021, 2022, and 2023.

<sup>21</sup> Drive Electric Minnesota (n.d.). [How to electrify your fleet: Lessons from cities.](#)

EV-ready action category	Action	Description
Zoning and subdivision ordinances	Land use	Allow EV charging stations as a permitted land use.
	Design and construction	Establish standards for installing charging infrastructure to support public, commercial, and multi-family electric vehicle supply equipment (EVSE).
		Establish standards for signage and safety of EVSE.
	EV parking standards	Establish design and location standards, as well as protections, for electric vehicle parking spaces.
		Establish EV parking capacity and minimum parking requirements.
ROW permitting	Develop permit for Public Right-of-Way charging.	
Administration	Installation guidelines	Provide education to businesses, developers, homeowners, and electrical contractors about EVSE installation guidelines.
	Online permitting	Create an online process for EVSE permitting.
Programs	Planned Unit Development	Include amenity points for EVSE and/or include EVSE as a condition of design approval.
	Sustainable building policy	Require a set number or percentage of parking to have electric charging in accordance with sustainable building rating best practices.
	City financing for EVSE	Add EV charging infrastructure and equipment as eligible parking lot improvement expenses under the BRLF loan program.
		Add EV charging infrastructure and equipment as eligible energy improvement expenses under the HIA loan program.
	Utility rebates	Promote Xcel Energy rebates for EVSE installation.
City fleet EVs	FleetCarma study	Conduct a study with FleetCarma to identify opportunities to replace ICE vehicles in Oakdale's fleet with an electric vehicle.