## LEGISTAR #61929 Body

DRAFTER'S ANALYSIS: This ordinance creates a new use in the Zoning Code, Electric Vehicle Charging Facility. This would be a stand-alone facility existing for the purpose of providing electric vehicle charging on a retail basis—like a gas station. These facilities may not also sell other types of vehicle fuel, such as gasoline. Under this ordinance, these facilities would be permitted uses in the Neighborhood Mixed-Use (NMX), the Traditional Shopping Street (TSS), Mixed-Use Center (MXC), Commercial Center Transitional (CC-T), Commercial Center (CC), Downtown Core (DC), Urban Office Residential (UOR), Urban Mixed Use (UMX), Traditional Employment (TE), Suburban Employment (SE), Suburban Employment Center (SEC), Employment Campus (EC), Parks and Recreation (PR), and Airport (AP) districts.

This ordinance also creates a requirement that certain commercial and residential parking facilities of a certain size and constructed after the effective date of this ordinance be constructed so that up to 50% of all spaces are electric vehicle capable (served with conduit/raceways and panel capacity to allow for the future installation of an EV changing station) and up to 10% of all spaces be electric vehicle ready (served with at least a Level II electric vehicle charging station). These EV capable and EV ready requirements will phase in over 5-year increments, beginning on January 1, 2021, to account for current and future market needs.

The purpose of this amendment is to ensure and encourage the present and future availability of electric vehicle charging stations in parking facilities throughout the City. Future projections are that by 2038, EV sales nationwide will eclipse internal combustion engine vehicle sales and that by 2040 over 57% of the total new car market will be for EVs. In Madison, recent data showed that 1.9% of new vehicles sold were electric vehicles—the highest such rate in the Midwest. Additionally, EV sales in Wisconsin increased by 24% from 2017 to 2018. As electric vehicles see greater adoption by the market, and to meet the projected increased future demand for charging infrastructure, it will be necessary to retrofit older parking facilities. This ordinance ensures that not only will current and near-term charging station demand be met, but that future charging station demand can be cost-effectively provided. It is far cheaper and more efficient to build EV capable spaces at the time of new construction than to retrofit parking facilities in the future.

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The Common Council of the City of Madison do hereby ordain as follows:

1. Section 28.211 entitled "Definitions" of the Madison General Ordinances is amended by creating therein the following:

"<u>Auto Service Station</u>. A place where gasoline, electricity, or any other automobile engine fuel, kerosene, motor oil, lubricants, <u>or grease</u> (for operation of motor vehicles), <u>or minor accessories are is</u> retailed directly to the public on the premises and/or where the servicing or minor repair of automobiles may occur, and which may include electric vehicle charging stations or the sale of minor automobile accessories.

<u>Electric Vehicle</u> or <u>EV</u> means any vehicle that is licensed and registered for operation on public and private highways, roads, and streets, and that operates either partially or exclusively, on electrical energy from the grid, or an off-board source, that is stored on-board via a battery for motive purpose. Electric Vehicle includes:

- (1) a battery electric vehicle; and
- (2) a plug-in hybrid electric vehicle.

<u>Electric Vehicle Charging Facility</u>. A stand-alone facility where electricity is provided directly to the public on the premises for purposes of charging electric vehicles at one or more electric vehicle charging stations. An Electric Vehicle Charging Facility may also retail minor accessories but may not provide other types of vehicle fuel, such as gasoline.

<u>Electric Vehicle Charging Station</u>. A parking space that is served by electric vehicle supply equipment for the purpose of transferring electric energy to a battery or other energy storage device in an electric vehicle. The terms Level I, 2, and 3 charging stations are the most common electric vehicle charging levels, and include the following specifications:

- (1) Level I is considered slow charging and operates on a 15 to 20 amp breaker on a 120 volt AC circuit.
- (2) Level 2 is considered medium charging and operates on a 40 to 100 amp breaker on a 208 or 240 volt AC circuit.
- (3) Level 3 is considered "fast" or "rapid" charging and typically operates on a 60 amp or higher breaker on a 480 volt or higher three phase circuit with special grounding equipment. Level 3 stations are primarily for commercial and public applications and are typically characterized by industrial grade electrical outlets that allow for faster recharging of electric vehicles.

<u>Electric Vehicle Supply Equipment or EVSE</u> are the conductors, including the ungrounded, grounded, and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

<u>EV Capable Space</u> means a designated parking space which is provided with electrical panel capacity and space to support a minimum 40-ampere, 208/240-volt branch circuit, and the installation of raceways, both underground and surface mounted, to support the future installation of EVSE to serve the parking space.

<u>EV Ready Space</u> means a designated parking space which is provided with one 40-ampere, 208/240-volt dedicated branch circuit for EVSE servicing Electric Vehicles. The circuit shall terminate in a suitable termination point such as a receptacle, junction box, or an EVSE, and be located in close proximity to the proposed location of the EV parking space."

- 2. Subdivision (e) entitled "Electric Vehicle Charging Station Requirements" of Subsection (8) entitled "Parking Design and Location" of Section 28.141 entitled "Parking and Loading Standards" of the Madison General Ordinances is created as follows:
- "(e) <u>Electric Vehicle Charging Station Requirements</u>. Parking facilities shall be designed and built to meet the following requirements:
  - 1. Where 6 or more parking spaces are being provided for residential uses, the following standards must be met:

Years	EV Capable Spaces	EV Ready Spaces (Min. of Level 2)
2021-2025	10%	2%
2026-2030	20%	4%
2031-2035	30%	6%
2036-2040	40%	8%
2041+	50%	10%

2. Where parking is being provided for certain uses where people park vehicles in excess of six hours, as specified in this paragraph, the following standards must be met:

	Years	EV Capable Spaces	EV Ready Spaces (Min. of Level 2)
	2021-2025	10%	1%
	2026-2030	20%	2%
	2031-2035	30%	3%
Ī	2036-2040	40%	4%
	2041+	50%	5%

- a. The requirements of this paragraph shall apply to the following uses:
  - i. College, University or Similar Institutions of Higher Learning;
  - ii. Hotel, Inn, Motel;
  - iii. Hospital and Health Clinic;
  - iv. Office:

- v. Parking Facility, Private and Public;
- vi. Schools, Arts, Technical or Trade; or,
- vii. Any other use, except for those specified in subparagraph b., where people are typically expected to park vehicles in excess of six hours.
- b. The requirements of this paragraph shall not apply to the following uses:
  - i. Manufacturing;
  - ii. Restaurants;
  - iii. Retail;
  - iv. Service Business; or,
  - v. Warehousing and Storage.
- 3. Accessible Stations. Accessible charging stations shall be provided based on the following:

Number of EV Ready Stations Required	Min. Accessible
0-2	0
3-50	1
51-100	2
101+	3 +1 for each additional 50 stations"

3. Table 28D-2 of Section 28.061 entitled "Mixed-Use and Commercial Districts Uses" of the Madison General Ordinances is amended by amending and creating therein the following:

"Mixed-Use and Commercial Districts								
	ГМХ	NMX	TSS	MXC	CC-T	ပ္ပ	Supplemental Regulations	
Automobile Services								
Electric Vehicle Charging Facility		<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u> "		

4. The Table 28E-2 of Subsection (1) of Section 28.072 entitled "Downtown District Uses" of the Madison General Ordinances is amended by amending therein the following:

"Downtown and Urban Districts								
	DC	UOR	ЛМХ	DR1	DR2	Supplemental Regulations		
Automobile Services								
Electric Vehicle Charging Facility	<u>P</u>	<u>P</u>	<u>P</u> "					

5. Table 28F-1 of Subsection (1) of Section 28.082 entitled "Employment District Uses" of the Madison General Ordinances is amended by amending therein the following:

"Employment Districts								
	TE	SE	SEC	EC	71	91	Supplemental Regulations	
Automobile Services								
Electric Vehicle Charging Facility	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u> "				

6. Table 28G-1 of Subsection (1) of Section 28.091 entitled "Special District Uses" of the Madison General Ordinances is amended by amending therein the following:

"Special Districts								
Automobile Services	4	NA	CN	PR	AP	Supplemental Regulations		
Automobile Services	•	•						
Electric Vehicle Charging Facility				<u>P</u>	<u>P</u> "			