

Summary

Board Bill Number 163

Primary Sponsor: Alderwoman Heather Navarro

November 13, 2020

This bill will require that construction and renovations governed by the International Residential Code, (**Ordinance 70795**) provide Electric Vehicle Ready electric supply (EV Ready) in amounts provided by the ordinance, in general, one EV Ready space per dwelling unit with exceptions. The definition of EV Ready for the purpose of this bill is defined as designing and constructing a dwelling in a way that facilitates and optimizes the installation of electric vehicle supply equipment during construction and Level 3 alterations. The ordinance does not require the construction of parking beyond what is required by the Zoning Code. Physical requirements for an EV ready location consist of the following: an adequately sized electrical service supply, conduit and conductor from the electric service panel to a termination point and branch circuit capacity for a 208/240V 50A dual pole circuit breaker.

This bill will empower the City of St. Louis to prepare for the future of electric vehicles and the growing demand for electric vehicle charging as the electric vehicle fleet increases. Numerous positive benefits are an outcome of transportation electrification, such as reduced air pollution and carbon emissions, workforce development for electricians and reduced operating costs over the lifetime of the vehicle.

BOARD BILL NUMBER 163 INTRODUCED BY: ALDERWOMAN HEATHER B. NAVARRO/ ALDERWOMAN ANNIE RICE/ ALDERMAN DAN GUENTHER/ ALDERWOMAN CHRISTINE INGRASSIA/ ALDERWOMAN BETH MURPHY/ ALDERMAN JESSE TODD/ ALDERMAN BRET NARAYAN

1 An ordinance pertaining to electric vehicle charging stations, amending **Ordinance #70795**
2 which adopted the 2018 International Residential Code, as amended, and codifying said changes in
3 Chapter 25 of the Revised Code of the City of St. Louis; and containing a Severability Clause,
4 Savings Clause and an Effective date.

5 **WHEREAS**, the use of vehicles powered by electricity is growing in the United States and
6 should be encouraged for the benefit of the environment and human health, and is consistent with
7 the Sustainability Plan of the City of St. Louis; and

8 **WHEREAS**, the air pollution levels in the City of St. Louis have not met the National
9 Ambient Air Quality Standard for ozone for the past twenty-eight (28) years and this harmful
10 pollution forms from vehicle exhaust and other industrial processes, and, according to the American
11 Lung Association, is responsible for respiratory harm, chronic obstructive pulmonary disease
12 (COPD) exacerbations, asthma attacks, heart attacks, strokes, and premature deaths; and

13 **WHEREAS**, the report “Environmental Racism in St. Louis” published in 2019 by the
14 Interdisciplinary Environmental Clinic at the School of Law at Washington University in St. Louis
15 highlights that Black, Indigenous People of Color (BIPOC) are exposed to a greater share of the
16 pollution than the rest of St. Louis and that many neighborhoods bordering major highways are
17 majority-Black, increasing exposure to harmful emissions from vehicles; and

18 **WHEREAS**, 17% of St. Louis’ greenhouse gas emissions are from transportation, and
19 electric vehicles (EVs) in Missouri currently emit 33% fewer greenhouse gases than gasoline
20 vehicles, and we can expect this number to improve as more solar and wind power replace fossil fuel
21 energy on the electric grid; and

1 **WHEREAS**, the majority of electric vehicle charging is completed at home; and

2 **WHEREAS**, this bill will ensure that electric Vehicle Charging Stations will be installed as
3 set forth herein; and

4 **NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF ST. LOUIS AS**
5 **FOLLOWS:**

6 **SECTION ONE.** Amendment to Chapter One, Section R107.2., of the 2018 International
7 Residential Code, as amended and adopted by **Ordinance 70795**, and adding a Section R107.2.10,
8 as follows:

9 Section R107.2 Construction Documents.

10 Construction documents shall be in accordance with Sections R.107.2.1 – ~~R.107.2.9~~ **R.107.2.10**

11 **R.107.2.10 Information for electric vehicle charging stations.**

12 **Construction documents shall include electric vehicle charging stations with system**
13 **installation requirements set forth in Section 309.6 and the Electrical Code.**

14 **SECTION TWO.** Amendment to Chapter 2, Section R202, of the 2018 International Residential
15 Code as amended and adopted by **Ordinance 70795**. Section R202 is hereby amended by adding
16 the following definitions, to the listed Definitions in alphabetical order. The definitions to be added
17 shall read as follows:

18 **A. “Electric Vehicle Ready Space” is defined as a designated parking space**
19 **which is provided with one 50 ampere, 208/240 volt dedicated branch circuit for EVSE**
20 **servicing Electric Vehicles. The circuit shall terminate in a suitable termination point**
21 **such as a receptacle or junction box and be located in the close proximity to the**
22 **proposed location of the Electric Vehicle parking space.**

1 **B. “Electric Vehicle Supply Equipment (EVSE)” is defined as the conductors,**
2 **including the ungrounded, grounded, and equipment grounding conductors, and the**
3 **electric vehicle connectors, attachment plugs, and all other fittings, devices, power**
4 **outlets, or apparatus installed specifically for the purpose of transferring energy**
5 **between the premises wiring and the electric vehicle.**

6 **C. “EVSE Installed Space” is defined as a designated parking space which is**
7 **provided with EVSE installed.**

8 **SECTION THREE.** Amendment to Chapter 3 of the 2018 International Residential Code as
9 amended and adopted by the City of St. Louis in **Ordinance 70795**, approved July 6, 2018.

10 **A. The 2018 International Residential Code, as amended and adopted by the City**
11 **of St. Louis for new construction shall require installation of EV Ready Spaces**
12 **in accordance with Section R309.6.**

13 **B. The 2018 International Residential Code, as amended and adopted by the City**
14 **of St. Louis for Level 3 alterations shall require installation of EV Ready**
15 **Spaces in accordance with Section R309.6 on January 1st, 2024, and thereafter.**

16 **C. Chapter 3 is hereby amended by the amendment of the title of “SECTION 309**
17 **GARAGES AND CARPORTS” to read as follows:**

18 **SECTION 309 GARAGES, CARPORTS AND OFF-STREET PARKING.**

19 **D. Section R309.6 shall be added, and shall read as follows:**

20 **R309.6 Electric Vehicle Charging Stations. Single dwelling units with a garage,**
21 **carport or off-street parking space shall have a minimum of one EV Ready**
22 **parking space. When Electric Vehicle Supply Equipment is installed it shall be**

1 **in accordance with the Electrical Code. Electrical vehicle charging system**
2 **equipment shall be listed and labeled in accordance with UL 2594.**

3 **Exception: Detached garages, carports and off-street parking spaces fifty feet**
4 **and greater distance from the main structure measured from the exterior of the**
5 **structure to the edge of the garage/carport or parking surface are exempt from**
6 **the requirements set forth herein, as are existing dwellings with insufficient**
7 **electrical service capacity.**

8 **SECTION FOUR. Severability.** In the event any part or provision of this ordinance is held
9 to be illegal or void, this shall not have the effect of making void or illegal any other parts or
10 provisions thereof, which are determined to be legal; and it shall be presumed that this ordinance
11 would have been passed without such illegal parts or provisions. Any invalid part of this ordinance
12 shall be segregated from the remainder of this ordinance by the court holding such part invalid, and
13 the remainder shall remain effective.

14 **SECTION FIVE. Savings Clause.** Nothing in this ordinance hereby adopted shall be
15 construed to affect any suit or proceeding impending on any court, or any rights acquired, or any
16 cause or causes of action acquired or existing under any current act or ordinance; nor shall any just
17 or legal right or remedy of any character be lost, impaired or affected by this ordinance.

18 **SECTION SIX. Penalty Clause.** Any person who shall violate a provision of this ordinance
19 or shall fail to comply with any provision thereof, or who shall erect, construct, alter, extend, repair,
20 remove, demolish, use, or occupy any building, structure or premises, or equipment regulated by this
21 code in violation of an approved construction document or directive of the building official or the
22 Board of Building Appeals, or of a permit or certificate issued under the provisions adopted in this

1 ordinance, shall, upon conviction thereof, be punished by a fine or not more than \$500.00, or by
2 imprisonment not exceeding 90 days, or both such a fine and imprisonment. Each day that a violation
3 continues shall constitute a separate and distinct offence.

4 **SECTION SEVEN. Effective date.** After this bill is signed by the Mayor of the City of St.
5 Louis, this ordinance will become effective on January 1st, 2022.

BOARD BILL NUMBER 163

FISCAL NOTE

Preparer's Name: **Scott Ogilvie**

Phone Number or Email Address: ogilvies@stlouis-mo.gov

Bill Sponsor: **Alderman Heather Navarro**

Bill Synopsis:	This legislation requires that new construction and level 3 renovations governed by the International Residential Code (Ordinance 70795) meet a minimum electric vehicle ready requirement, with exemptions and effective dates. The ordinance will be administered in the normal course of plan review by the Building Division.
Type of Impact:	Basic training for building inspectors and is part of the existing plan review process.
Agencies Affected:	Building Division

SECTION A

Does this bill authorize:

- An expansion of services which entails additional costs beyond that approved in the current adopted city budget? Yes No.
- An undertaking of a new service for which no funding is provided in the current adopted city budget? Yes No.
- A commitment of city funding in the future under certain specified conditions? Yes No.
- An issuance of bonds, notes and lease-purchase agreements which may require additional funding beyond that approved in the current adopted city budget? Yes No.

- An execution or initiation of an activity as a result of federal or state mandates or requirements?

___Yes __X__No.

- A capital improvement project that increases operating costs over the current adopted city budget? ___Yes __X__No.

(09/2019)

- A capital improvement project that requires funding not approved in the current adopted city budget or that will require funding in future years? ___Yes __X__No.

If the answer is yes to any of the above questions, then a fiscal note must be attached to the board bill. Complete Section B of the form below.

SECTION B

- Does the bill require the construction of any new physical facilities? ___Yes __X__No.

- If yes, describe the facilities and provide the estimated cost:

- Is the bill estimated to have a direct fiscal impact on any city department or office?

___Yes __X__No.

- If yes, explain the impact and the estimated cost:

- Does the bill create a program or administrative subdivision? ___Yes __X__No.

- If yes, then is there a similar existing program or administrative subdivision?

___ Yes ___ No.

- If yes, explain how the proposed programs or administrative subdivisions may overlap:

- Describe the annual operating, equipment, and maintenance costs that would result from the proposed bill, as well as any funding sources:

Complete the chart below to list the total estimated expenditures required of the City resulting from the proposed board bill and any estimated savings or additional revenue.

Financial Estimate of Impact on General Fund			
Fiscal Impact	<u>Year 1 (current)</u>	<u>Year 2</u>	<u>Year 3</u>
Additional Expenditures	0	0	0
Additional Revenue	0	0	0
Net	0	0	0
Financial Estimate of Impact on Special Funds			
Fiscal Impact	<u>Year 1 (current)</u>	<u>Year 2</u>	<u>Year 3</u>
Additional Expenditures	0	0	0
Additional Revenue	0	0	0
Net	0	0	0

- Describe any assumptions used in preparing this fiscal note: The ordinance will be administered in the normal course of plan review by the Building Division.
 - List any sources of information (including any City officials, agencies, or departments) used in preparing this fiscal note: Frank Oswald, City of St. Louis Building

Commissioner, has informed the Office of the Mayor through this communication that a fiscal note is not necessary since there is no additional cost to the City of St. Louis, MO upon the passage of this legislation.

- Have the financial estimates of this bill been verified by the City Budget Division?
 Yes No.
- If yes, by whom? _____ .