

***H7112 will allow Rhode Island to prepare for electric vehicle adoption by requiring a minimum number of parking spaces at new construction to be EV-ready or EV-capable, reducing installation costs in the long-run.***

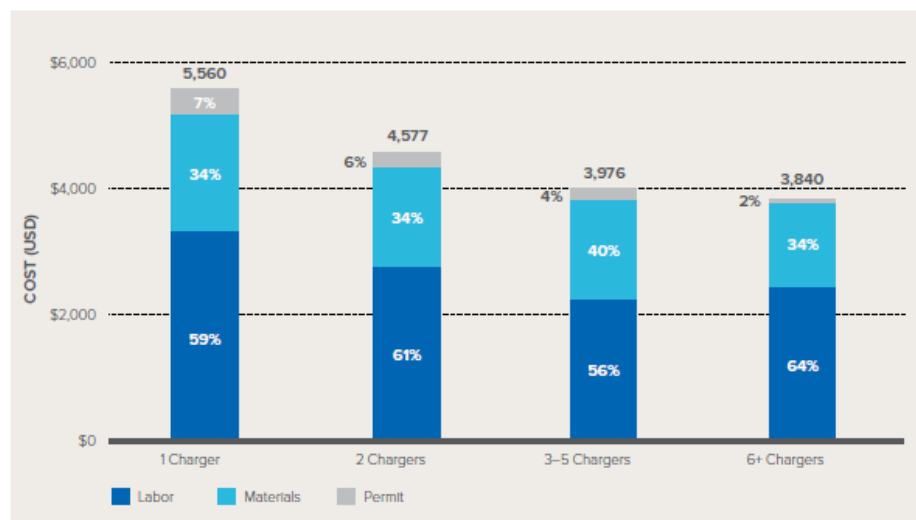
### **FAQs**

#### ***How much does installing EV charging cost for existing construction?***

Installation costs range widely depending on the site and number of chargers installed. According to Rhode Island’s Strategic Policy Guide for EV Charging, the average per-port cost of EV-ready infrastructure is roughly \$7,000 for Level 2 stations and \$45,000- \$50,000 for DC fast charging stations.<sup>1</sup> In Massachusetts, National Grid assumes the average customer-side make-ready infrastructure costs \$6,000 per port for Level 2 stations and \$40,000 per port for DC fast charging stations.<sup>2</sup>

According to the Rocky Mountain Institute, the cost per-port is expected to decrease over time as the EV charging industry matures and “soft costs” from complex permitting and project management delays decline.<sup>3</sup> The per-port cost also decreases when two or more ports are installed per site.

Average commercial Level 2 installation costs per charging station by cost category, by number of chargers per site.



Source: *Electric Vehicle Supply Equipment Installed Cost Analysis*, EPRI, 2013

<sup>1</sup><http://www.energy.ri.gov/documents/Transportation/Electrifying%20Transportation%20Guide%20Dec%202021.pdf>

<sup>2</sup> <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/13758107>

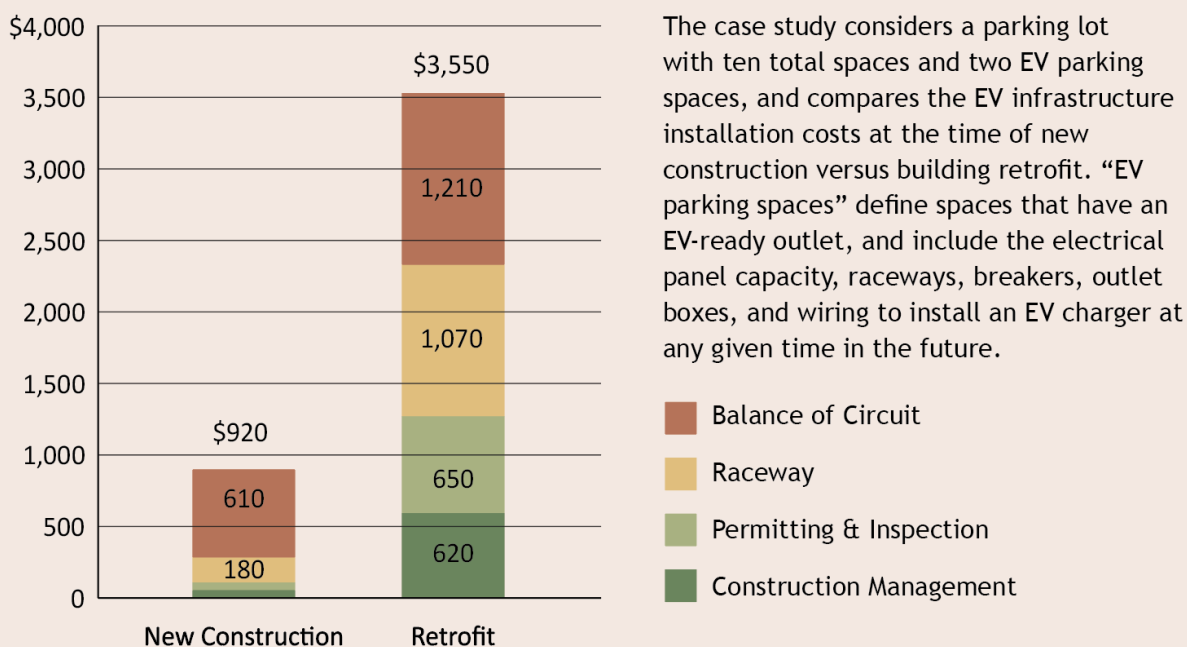
<sup>3</sup> <https://rmi.org/insight/reducing-ev-charging-infrastructure-costs/>

### ***How much does installing an EV charger cost for new construction?***

EV-ready or EV-capable charging infrastructure is significantly less expensive to install during new construction than it is for a building retrofit. According to one case study, for a parking lot with 10 total spaces and two charging stations, the estimated EV infrastructure costs amount to \$920 per charger during new construction, versus \$3,710 per charger for a retrofit, largely because of trenching, demolition, and additional permitting costs.<sup>4</sup> Overall, costs can be considered to be four times lower for new construction than retrofits.

### **Cost per EV Parking Space: New Construction vs Retrofit**

Case Study prepared for the City and County of San Francisco (2016)



### ***How does this bill compare to what other jurisdictions are doing?***

H7112 proposes that 4-10% of parking spaces be EV-ready or EV-capable, depending on the total number of spaces. Several states, cities, and counties across the US have requirements that align with the requirements of H7112.

<sup>4</sup> <https://www.swenergy.org/cracking-the-code-on-ev-ready-building-codes>

| <b>Jurisdiction</b> | <b>1-2 family dwellings</b> | <b>Multi-family unit dwellings</b>                          | <b>Commercial</b>                      |
|---------------------|-----------------------------|---|--|
| California          | EV-Capable                  | EV-Capable: 3% of parking (17+ spaces)                      | EV-Capable: 5% of parking (10+ spaces) |
| Washington          |                             | EV-Capable for 5%,<br>Panel capacity for future EVCS at 20% |  |
| Hawaii              |                             | EV-Capable: 1% of parking                                   |  |
| Oregon              | EV-Capable                  | EV-Capable: 5% of parking (50+ spaces)                      |  |
| Atlanta, GA         | EV-Capable                  | EV-Capable: 20% of parking                                  |  |

[More information can be found here.](#)

### ***How much has Rhode Island invested in EV charging already?***

Rhode Island has allocated \$1.4 million to the Electrify RI program from Volkswagen settlement funds and \$6.3 million through Power Sector Transformation investments by National Grid. Together, these two programs could be used to cover 100% of infrastructure and equipment costs to expand charging locations by retrofit multi-unit dwellings, workplaces, and public lots.

[Electrify RI](#) and the [National Grid EV Charging Station Program](#) have been popular and successful at increasing charging availability; H7112 can ensure future EV charging programs spend EV charging infrastructure dollars efficiently by requiring developers to consider EV charging early, saving on project management, permitting, and other soft costs, as well as preventing the additional construction costs of ripping up concrete to lay underground conduit.

### ***What funding is coming to help alleviate costs for EV charging installation?***

An additional \$23 million in ARPA funds have been allocated explicitly to expand the number of EV charging sites available in Rhode Island. More guidance on how these funds can be spent is expected to be released in February-March of 2022.