# **Appendix C:** Detailed Summary of Recommended Actions

| Category | Item | Description | Timeframe* |
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| **Electric Vehicles (i.e., Light-duty passenger vehicles)** | | | |
|  Policy & Regulation | **EV-Readiness requirements for new residential developments** | Require a certain percentage of parking stalls in new residential buildings (e.g., single-family dwellings, duplexes, fourplexes, townhomes, multi-unit residential buildings) to include an energized electrical outlet capable of minimum Level 2 charging. | Short |
| | **EV-Readiness requirements for new commercial developments** | Require a certain percentage of parking stalls in new commercial developments (e.g., parking lots) to include an energized outlet capable of minimum Level 2 charging. | Short |
| | **Continue to offer and investigate options for the Eco-Pass parking permit program** | This permit gives plug-in EV (PHEVs and BEVs) owners up to two hours per day of no-charge, on-street parking in Kelowna. The permit is valid for a period of one-year and cannot be renewed. | Ongoing |
| | **Investigate a fee structure for City-owned public chargers** | Implement user fees for EV charging to support cost recovery of EV charging infrastructure and increase turnover. This needs to be considered in concert with parking costs for stalls where EV charging infrastructure is provided. | Medium |
|  **Infrastructure** | **Expand the off-street public level 2 charging network** | Continue to use off-street City-owned parking lots and parkades to strategically expand the Level 2 charging network. This includes approved budget for 2020-2021 for up to eight chargers ($135,000), which could be expanded if a federal grant through the Zero-Emission Vehicle Infrastructure Program (ZEVIP) is successful. This level of investment would be required annually to support EV expansion. | Ongoing |
| | **Explore on-street charging** | Explore options to provide on-street charging infrastructure where on street parking is provided (e.g., parallel and diagonal parking stalls along city streets). | Ongoing |

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|  <br>Collaboration & Partnerships | **Partner with FortisBC on an EV streetlamp charging pilot** | Identify use cases (e.g., garage orphans, public parking) for on-street charging and determine if the City can utilize available electricity capacity from LED streetlamp conversion for EV charging. A pilot program, in partnership with FortisBC, is the first step in determining if this is a feasible and worthwhile venture. | Short |
| | **Partner with FortisBC to expand the Level 3 charging network** | FortisBC has been actively expanding the Level 3 DCFC charging network in its regional electricity service territory over the past few years. These locations are particularly valuable to visiting EV owners who need a fast charge. Existing partnerships between FortisBC and the City have resulted in chargers at the airport, Rutland Centennial Park, and Museum parking lot. The City will explore additional partnership opportunities with FortisBC to expand the fast charging network. | Ongoing |
| | **Work with Modo carshare to advance electrification of shared mobility** | Modo has a strategic priority to electrify its carsharing fleet, but access to adequate charging infrastructure remains a barrier. The City will look for opportunities to leverage expansion of the public EV charging network with providing access to charging for Modo's fleet. | Short-medium |
| | **Establish a Regional Local Government EV Peer Network** | Recognizing that a regional network of EV infrastructure is more likely to create consumer confidence in the technology, and EV drivers do not stay within City of Kelowna boundaries, staff will look to establish a network of local government representatives that considers regional approaches to expand EVs and associated charging infrastructure. | Short |
|  <br>Incentives | **Municipal top-up to provincial residential charging incentives** | Municipalities can "top up" Provincial and Fortis charger rebate offers for single family-home and/or multi-unit residential building (MURB) chargers. | Short |

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|  Education & Awareness | **Community engagement on strategy development** | In Fall 2020 the City will be issuing a survey and conducting focus group with EV and E-bike stakeholders to understand local barriers to EV/E-bike adoption and to understand how the City can support EV and E-bike expansion in the community. | Short |
| | **Educate owners and managers of existing apartments and workplaces** | Work with the provincial government, FortisBC, EV charging service providers, and/or other entities to educate owners and managers of existing apartments and workplaces on the benefits of retrofitting existing buildings to have EV-ready parking available for tenants and employees. | Short |
| | **Create an EV Readiness best practices guide for new residential buildings** | To support builders and developers in providing appropriate/adequate EV charging infrastructure, the City will look to provide a best practices guide. This could support "EV-Readiness" policy shifts if endorsed by Council. | Medium |
| | **Use City channels to create awareness of EV benefits and programs** | Many residents still do not know the benefits and opportunities around EVs and E-bikes. In addition, many of the recommended policies and programs will only be successful if there is widespread awareness throughout the community. The City can use its own marketing channels to distribute EV and E-bike information to the public. | Ongoing |
|  Advocacy | **Advocate for "Right to Charge" legislation** | Currently, EV owners in MURBs with strata corporations struggle to convince strata councils to install appropriate EV charging infrastructure. "Right to charge" legislation at the Provincial level could address this barrier by amending the *BC Strata Property Act* with language that requires strata councils and strata corporations to accommodate reasonable requests from residents for EV charging infrastructure. | Short-Medium |

| E-bikes | | | |
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|  Policy & Regulation | **Assess the feasibility of e-bike charging requirements for new residential developments** | Require a certain percentage of long-term bicycle storage spaces in new residential buildings (e.g., single-family dwellings, duplexes, fourplexes, townhomes, multi-unit residential buildings) to have an electrical outlet capable of providing e-bike charging. | Short |
| | **Update local regulations to be more permissive of e-bikes** | Local traffic and parks bylaws often unintentionally ban new modes by not explicitly mentioning them. E-bikes should be considered as candidates for inclusion in local bylaws that govern active transportation facilities to broaden the potential and appeal for active and space-efficient transportation. | Short |
|  Infrastructure | **Expedite the build-out of cycling infrastructure** | Prioritize cycling infrastructure development, as indicated in the Pedestrian and Bicycle Master Plan and draft Transportation Master Plan and increase the annual level of investment to expedite the development of a safe and connected bicycle network. This investment will help reduce barriers to cycling and accommodate the greater potential use of bicycle infrastructure that e-bikes enable (e.g., continue to pursue separation on busy shared pathways to accommodate higher volumes of e-bikes expected in the future). | Ongoing |
| | **Pilot e-bike public chargers at strategic locations** | Because many e-bikes have removable batteries that can be recharged indoors, public charging infrastructure is less important for e-bike adoption than for EVs. However, public e-bike charging at strategic locations could support longer e-bike trips. | Ongoing |
| | **Explore secure public storage options for e-bikes** | One of the main challenges with e-bikes compared to regular bikes is owners' comfort with using public bike locks/storage because e-bikes are typically a higher value. Thus, staff will explore what public lock/storage options are could help overcome this barrier. | Short-Medium |
|  Incentives | **Consider e-bike incentives for certain demographics** | E-bikes are still more expensive than most non-electric bicycles but allow users to travel further distances with minimal effort and are much cheaper than EVs. To help e-bikes become more affordable for low-income and seniors, the City could consider offering a limited number of e-bike financial rebates. | Short |

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| | **Implement an e-bike Purchase Loan Program for City of Kelowna employees** | To help promote low-carbon and active transportation amongst City employees, the City could offer an e-bike/bike Purchase Loan Program. Under the program, the City would borrow the full cost for City employees of a new e-bike or regular bicycle, and the cost would be payroll deducted for up to 24-month period. If successful, the program could be replicated by other employers in the community, | Short |
|  Education & Awareness | **Community engagement on strategy development** | In Fall 2020 the City will be issuing a survey and conducting focus group with EV and e-bike stakeholders to understand local barriers to EV/E-bike adoption and to understand how the City can support EV and E-bike expansion in the community. | Short |
| | **Use City channels to create awareness of E-bike benefits and programs** | Many residents still do not know the benefits and opportunities around EVs and E-bikes. In addition, many of the recommended policies and programs will only be successful if there is widespread awareness throughout the community. The City can use its own marketing channels to distribute EV and E-bike information to the public. | Ongoing |

* Short = 0-2 years; Medium = 3-5 years; Ongoing = start time may vary but will continue on an annual basis for the foreseeable future.