

AUG 31, 2022

# **ABB E-mobility**

North America

(Peter King/ Business Development Mgr – Utility Segment)



# **ABB E-mobility Charging Products Portfolio**



#### **DESTINATION DC**

**Terra DC Wallbox** 20 to 24 kW



All-in-one systems

#### **DC FAST**

**Terra 54/94/124/184** 50 to 180 kW



#### DC HIGH POWER

Terra HP 175 kW to 350 kW



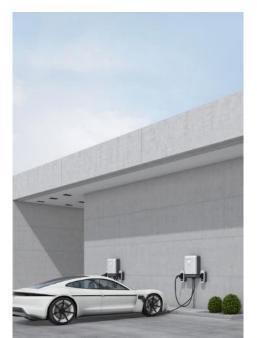
#### **FLEET & TRANSIT**

**HVC-C Depot Box** 100 kW to 150 kW



#### TRANSIT HIGH POWER

**HVC-PD Panto Down** 150 kW to 600 kW











split systems

# Reliability for Electric Vehicle Infrastructure - A Lot of Moving Parts That Are NOT in the Vehicle!

Electric Transportation is a paradigm shift as to how fuel type is now delivered for fleet. In past it has been the fleet/fuels group responsible for providing the fueling of fleet assets.

With electric transportation the responsibility shifts to the facilities department to provide electrical power required for desired fleet operations



**Weather/Elements** 

# Vehicle compatibility with EVSE

Internal components
Modem
Breakers
Cooling system

**Operator Error** 

Comms with Network Software

Normal wear/tear



**Vandalism** 

**Accidents** 

**Critters** 



## **Reliability Cuts Across Multiple Areas**

### **Procurement**

- Warranties (Standard vs extended)
- Parts & labor
- Spare Parts
- Service Level Agreements
- Remote diagnostics
- 3<sup>rd</sup> party
- Expectations of organization
- Business Needs

## **Facility**

- Placement of equipment
- Electrical connections surge protection/back-up/Upgrades
- Internal Resources who will maintain on site? Certifications needed (Preventative Mtc)
- Who is responsible for charging of vehicles
- Driver Education

## Feedback loops

- Network software services?
- How can they integrate to create issue awareness i.e. service tickets
- Monitor System Uptimes
- Regular Inspections for damage and safety



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# **Blooper reel**

## Keep the critters out





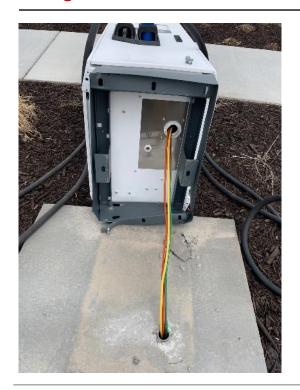


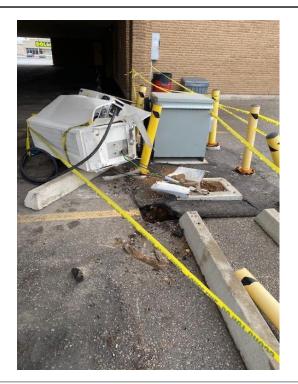


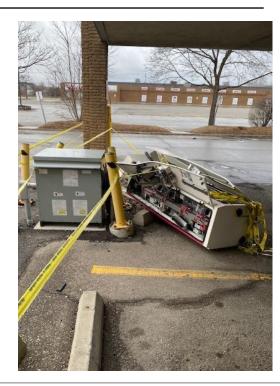
# **Blooper reel**

## Importance of bollards and/or wheel stops

#### Charger without bollards vulnerable to being struck by a vehicle







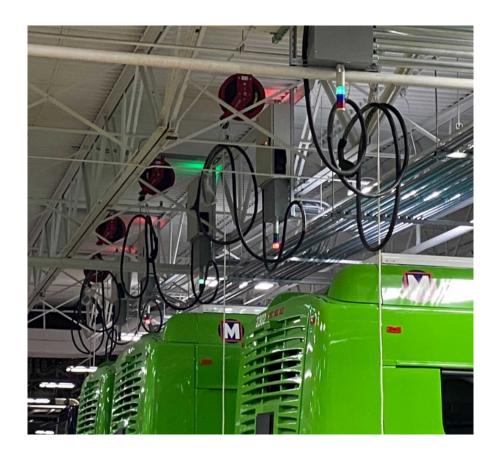
Charger with poorly placed bollard limits service entry

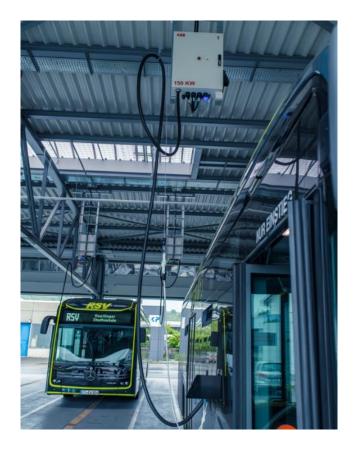




# **Dispenser Locations**

## Mounted overhead







# **Plug In applications**

Remote Dispenser mounted closer to vehicle









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