



Transit Advisory Committee

Transit Fleet Update

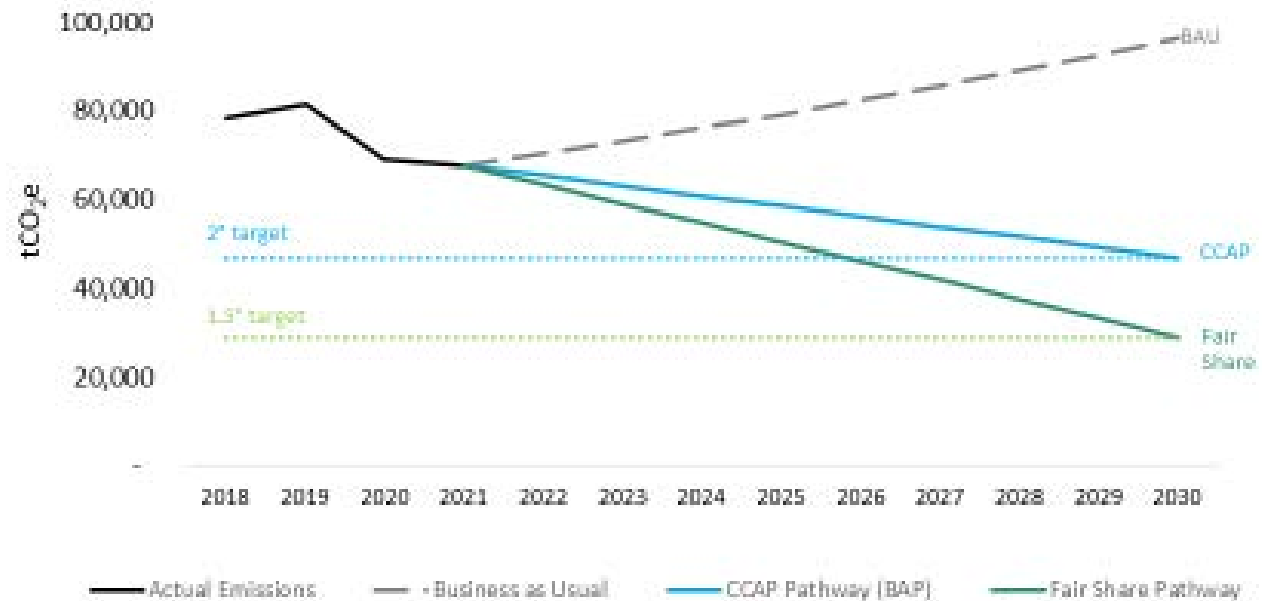
Climate Change Action Plan Updates

1.5° Fair Share Pathway

- Aligned with best practice and Race to Zero
- Buildings Study Roadmap 3
- Further Accelerate MiWay Electrification (max BEB capacity and additional 40 hydrogen buses)
- 100% Corporate Fleet and Fire LD electrification
- DE Phase 1A downtown
- City Tree Program

✓ Meet CCAP and exceed by 17,000 tCO₂e
Miss 1.5° by 400 tCO₂e

CORPORATE PATHWAYS TO 2030 TARGETS - OVERVIEW



MiWay's Updated GHG Emission Reduction Targets⁷²

	2018 GHG tCO ₂ e	2018 % GHG	2030 GHG tCO ₂ e	2030 % GHG
Buildings	19,518	25%	7,222	25%
Corporate Fleet	3,786	5%	1,401	5%
Fire Fleet	816	1%	302	1%
Transit Fleet	53,013	68%	19,615	68%
Streetlighting	434	1%	161	1%
Waste	904	1%	335	1%
Total	78,471	100%	29,035	100%

Transit Reduction Target (2018 to 2030) 63%



- **Hybrid-Electric Buses**

- MiWay purchased the last conventional diesel bus in 2018.
- Since 2019, MiWay has taken delivery/taking delivery of 273 hybrid buses by the end of 2024.
- Stepping stone to zero-emission transit bus

- **Zero-Emission Buses**

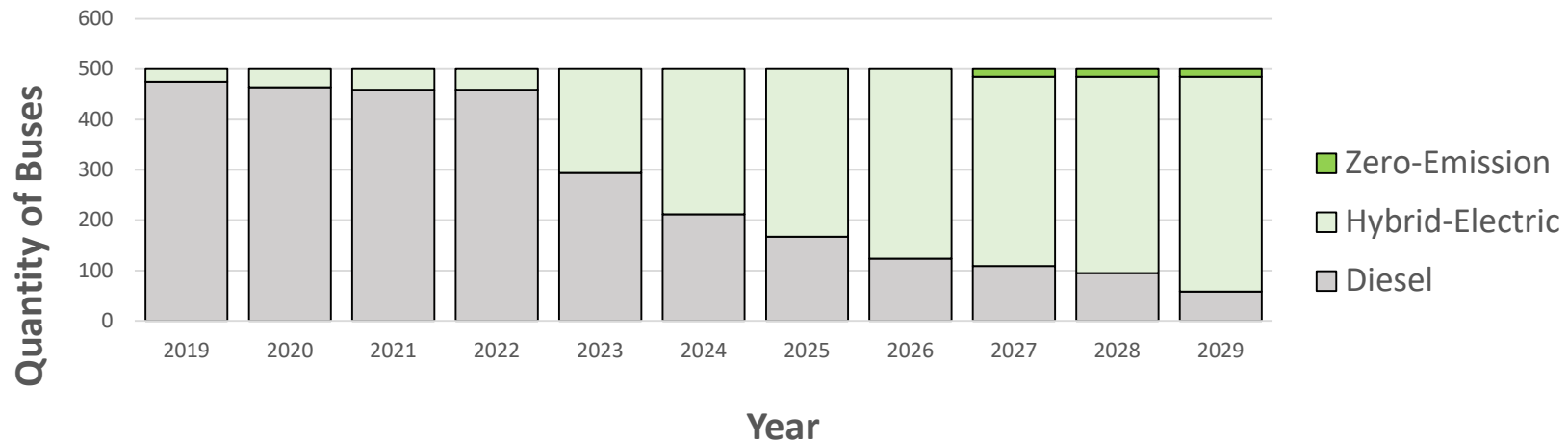
- MiWay will be purchasing (15) Battery-Electric Buses (BEBs) to be operating out of the CX garage.
- Challenges and Risks of ZEBs
 - High capital costs
 - Infrastructure requirements
 - Limited range and charging times
 - Staffing requirements
 - Infrastructure construction disruptions
 - Unclear future technology developments



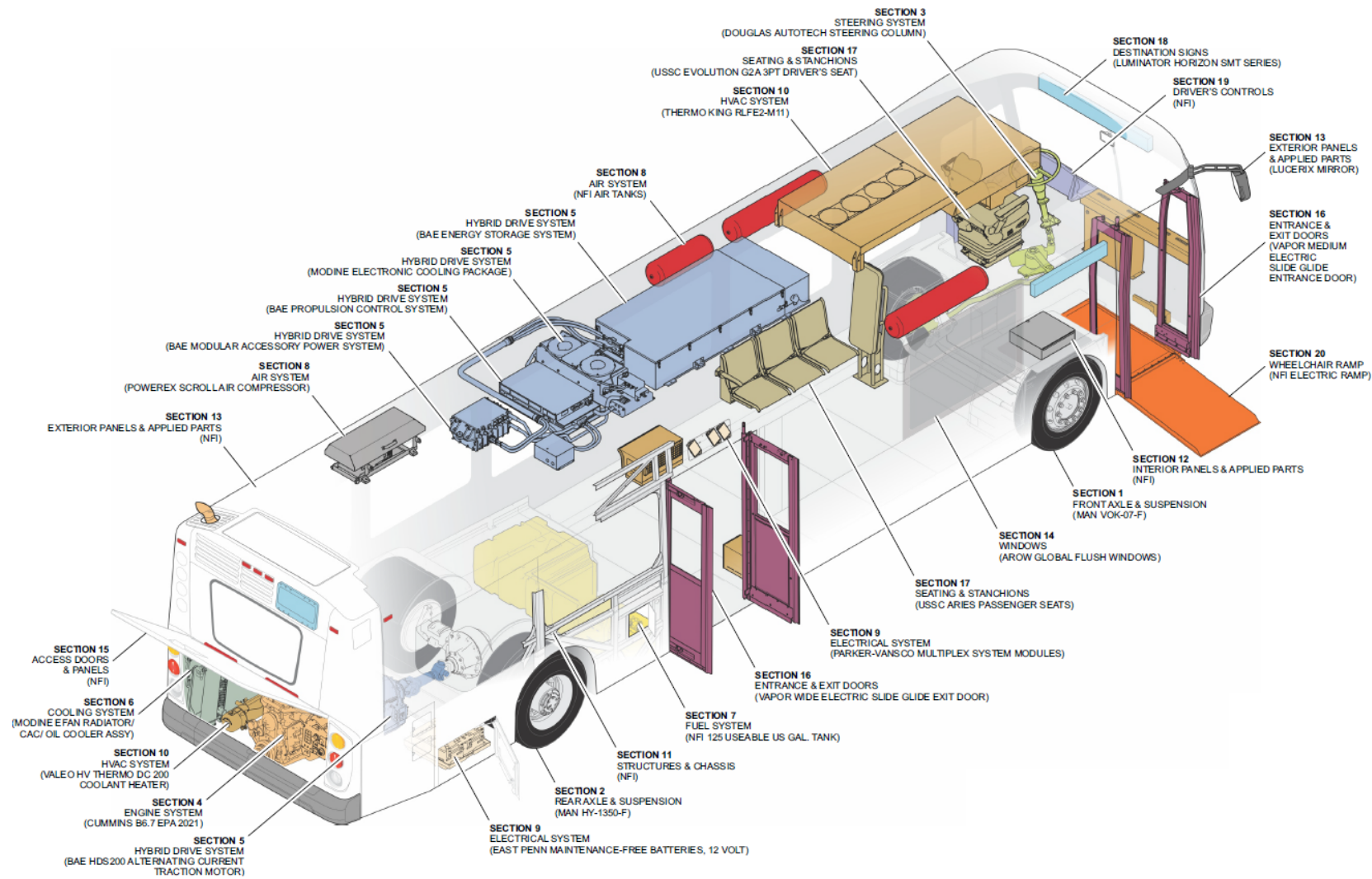
MiWay Fleet Transition over Time

Fleet Projection	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Diesel	475	464	459	459	294	212	167	124	109	95	58
• Forty-Foot	421	410	405	405	255	173	138	95	80	66	29
• Sixty Foot	54	54	54	54	39	39	29	29	29	29	29
Hybrid-Electric	25	36	41	41	206	288	333	376	376	390	427
• Forty-Foot	25	25	25	25	152	234	269	312	312	326	333
• Sixty Foot	0	11	16	16	54	54	64	64	64	64	64
Zero-Emission	0	0	0	0	0	0	0	0	15	15	15
• Forty-Foot	0	0	0	0	0	0	0	0	15	15	15
• Sixty Foot	0	0	0	0	0	0	0	0	0	0	0
Total:	500	500	500	500	500	500	500	500	500	500	500

MiWay Bus Fleet Propulsion System Transition Over Time



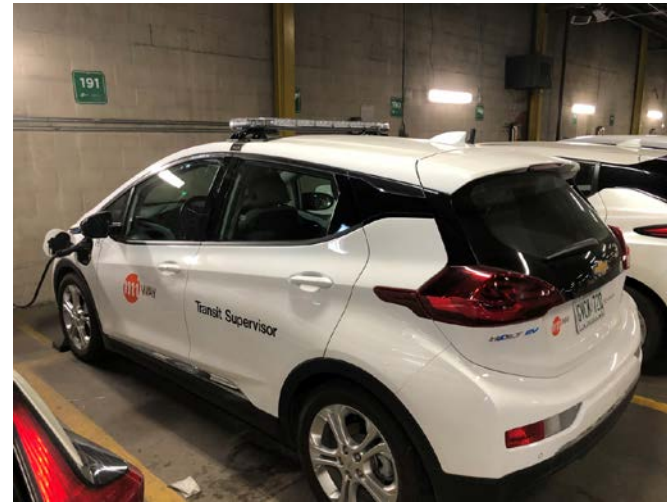
Hybrid-Electric Bus Schematic Layout



Non-Revenue Fleet Replacement

2023 EV Procurement

- 12 Charge-offs
- 9 Route Supervisor
- 2 Infrastructure
- 1 Business Systems





Major Current and Ongoing Projects

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- **Major Completed Projects**

- Ceiling Modification Project
- Central Parkway & Malton Electric Chargers Project
- Battery-Electric Bus Chargers – Feasibility Study
- Hydrogen Fuel Cell Electric Bus – Feasibility Study
- Hydrogen Fuel Cell Electric Bus – Facilities Review Study

- **Major Ongoing Projects**

- Central Parkway Annex (CX) BEB Modification Study
- Hydrogen Fuel Cell Electric Bus (FCEB) Project
- Procurement of Non-Revenue EVs
- Existing Delivery of (165) Hybrid Buses
- New Procurement of (82) Hybrid Buses
- West Credit Feasibility Design Study



Thank you

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