CURRENT CONDITIONS AND CANADIAN BEST PRACTICES

Community-Based Electrification for Rural Nova Scotia

Summary of Findings

Rural and mixed urban-rural communities in Nova Scotia and across Canada are advancing electric mobility through localized planning, targeted investments, and strategic partnerships. The examples of Yarmouth, NS; Colchester, NS; Saanich, BC; West Perth, ON; and Canmore AB highlight several consistent themes that can inform rural electrification efforts.

Current Conditions in Rural Nova Scotia

Yarmouth and Colchester demonstrate the varied but shared challenges of rural electrification.

- Both communities rely heavily on personal vehicles and have limited public transit options.
- Each municipality has begun expanding charging infrastructure, updating local policy frameworks, and exploring opportunities to reduce transportation emissions.

Yarmouth's growing charging network and early fleet electrification efforts show momentum supported by provincial investments. Colchester's planning updates and transit feasibility work highlight the role of land-use and mobility planning in enabling future EV readiness.

Best Practices from Canadian Case Studies

The Canadian case studies illustrate how rural and small municipalities are progressing through coordinated action:

Planning and Strategy Development

- Saanich advanced electrification through a comprehensive Electric Mobility Strategy, setting clear emissions targets and integrating EV-ready requirements in new developments.
- West Perth participated in a multi-municipality regional strategy that enabled a coordinated approach to rural charging needs.
- Canmore aligned local action with a regional charging network, ensuring connectivity for residents and visitors.

Investment in Charging Infrastructure and Fleets

- All three municipalities made early investments in public charging and municipal fleet electrification.
- Infrastructure growth, ranging from Saanich's extensive network to West Perth's and Canmore's rural charging expansions, reflects increasing EV readiness.

Role of Partnerships

Municipalities partnered with regional organizations, utilities, provincial programs, and federal funders to accelerate implementation and access external expertise.

Cross-Cutting Challenges

Across all communities, three challenges consistently emerged:

- Limited public transit service, reinforcing reliance on personal vehicles
- Long distances between destinations, particularly in rural areas
- Need for accessible and reliable charging infrastructure for both residents and visitors

These conditions shape the pace and type of electrification efforts in rural settings.

Overall Insight

The cases demonstrate that rural communities can play a meaningful role in advancing electric mobility when investments, planning, and partnerships are aligned. While their contexts vary, each municipality shows that progress is achievable through clear strategies, collaborative approaches, and sustained commitment to infrastructure development.

About the Project

This strategy was developed as part of the Community-Based Planning and Design for the Electrification of Transport Systems in Rural Municipalities project, led by Dalhousie Transportation Collaboratory (DalTRAC) and funded by the Low Carbon Communities (LCC) program through the Nova Scotia Department of Natural Resources and Renewables. The project engaged rural communities across the province to co-design local electrification strategies.