

**State Planning and Research Program  
Quarterly Report**

**PROJECT TITLE:** *Evaluation of Electric Vehicle Technologies and Alternative Fuels for Winter Operations*

**OBJECTIVES:** Produce a Clear Roads synthesis report that examines the issues transportation agencies may encounter before converting an existing diesel-fueled winter maintenance fleet to one powered by electric vehicle technologies (EVT) or alternative fuels for winter maintenance programs.

**PERIOD COVERED:** April 1 to June 30, 2022

**PARTICIPATING AGENCIES:** Minnesota Department of Transportation and the Clear Roads Technical Advisory Committee

**PROJECT MANAGER:**  
Hafiz Munir / Tom Peters

**SP&R PROJECT NO:**

**PROJECT IS:**

**LEAD AGENCY:** MnDOT

MnDOT Contract No.  
1047790

Planning  
 Research & Development

**PRINCIPAL INVESTIGATOR:**  
Katherine Vigneau, CAFM  
Director, Matrix Consulting Group

Federal Project Number:  
TPF-5(353)

**ANNUAL BUDGET:** \$74,599

**PROJECT EXPENDITURES TO DATE:** \$ 13,400

**WORK COMPLETED:**

- Task 2 - Initial Interviews & RFI Analysis. Interview Guide created and approved. Interviews and initial data analysis in progress.
- Task 3 - Fuel Management Best Practices Analysis. Best Practices Checklist created and submitted for approval.
- Task 4 - Historical Fuel Commodity Use Analysis. Historical Fuel Commodity Use questions drafted and approved. Initial interviews are under way and a draft report is also in progress.
- Task 5 - Alternative Fuel Use Practices Survey. The survey was drafted and approved.
- Task 6 - EV & AFV OEM Suppliers – A suppliers list has been drafted and will be submitted for approval.

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

During the next quarter, we will complete the following:

- Task 2 - Initial Interviews & RFI Analysis. Interviews and data analysis will be completed and the Fleet Profile will be finalized.
- Task 3 - Fuel Management Best Practices Analysis. Best Practices Checklist will be approved by the TAC and filled out by the project team.
- Task 4 - Historical Fuel Commodity Use Analysis. Historical Fuel Commodity interviews will be completed and the report will be drafted and finalized.
- Task 5 - Alternative Fuel Use Practices Survey. Interviews will take place.
- Task 6 - EV & AFV OEM Suppliers – The TAC will approve the suppliers list.
- Task 7 - OEM Interviews. OEM interviews will be conducted.

**STATUS AND COMPLETION DATE:**

Interim deliverable dates were adjusted to give participants time to collect and hand in data. This will not impact the final deliverable date.

Completion date – 30 Dec 2022.