



# Worth to read: Ryders “Electric Vehicle - Total Cost to Transport Analysis”

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In response to frequent inquiries from customers regarding the costs and benefits of converting commercial diesel vehicles to zero-emission vehicles (ZEVs), Ryder conducted an analysis to evaluate the total cost of transitioning from internal combustion engines (ICE) to electric vehicles (EVs) for U.S. commercial fleets.

## Key Findings

### Cost Analysis by Vehicle Class:

- **Class 4 (Light-Duty):** Modest cost increase of up to 5% for converting to EVs.
- **Class 6 (Medium-Duty):** Significant cost increase of 22% to 28%.
- **Class 8 (Heavy-Duty):** Substantial cost increase of 94% to 114%.

### Mixed Fleet Conversion:

- **California:** Transitioning a mixed fleet (light, medium, and heavy-duty) of 25 vehicles results in a 56% cost increase.
- **Georgia:** The cost increase is even higher at 67%.

## **Economic Impact**

- **Inflation:** The increase in transportation costs due to EV conversion could potentially add approximately 0.5% to 1% to overall inflation.

## **Challenges**

- **EV Availability:** Limited production and availability of commercial EVs, with only an estimated 18,000 EVs out of 16.4 million Class 3-8 commercial vehicles in operation.
- **Charging Infrastructure:** Insufficient charging infrastructure with an estimated \$1 trillion investment needed to support electrification, according to the Clean Freight Coalition.

## **Conclusion**

Ryder's analysis highlights the substantial cost increases associated with converting commercial fleets from ICE to EVs, especially for medium and heavy-duty vehicles. This transition may lead to supply chain disruptions and inflationary pressures. Ryder emphasizes the need for collaborative efforts among regulators, manufacturers, and technology innovators to develop cost-competitive and efficient EV solutions, along with exploring other alternative fuel technologies.

**Read the full report:** [Electric Vehicle Total Cost to Transport Analysis \(ryder.com\)](https://www.ryder.com/ev-report)