

How Public Corridor Charging Increases Revenue and ROI

Executive Summary

Electric fleets that rely exclusively on behind the fence (BTF) charging may be leaving significant **revenue on the table**. This report quantifies the operational and financial gap between BTF-only charging models and an improved approach that integrates public high-power corridor charging and makes the case for why Greenlane Infrastructure could be the missing piece in your fleet's growth strategy.

1.6x

Net Revenue Multiplier
vs. BTF-only

3.2 yrs

Truck Cost Recovery
vs. 4.5 yrs BTF-only

+57%

Net Revenue Lift
Net per-truck per year

The most profitable fleets of 2026 will not be those with the largest batteries — they will be those with the highest asset utilization. Greenlane helps make that possible.



The Problem: Fleet Electrification is Hitting a BTF Ceiling

The first wave of fleet electrification was built around a simple promise: charge at night, dispatch in the morning. While this model works for short-haul, predictable routes, it creates a hard ceiling on revenue potential. BTF infrastructure — however well designed — can only do so much.

The core issue is that slow or medium DC charging imposes an opportunity cost measured in time. When a Class 8 tractor sits at a yard charger during the day, it is not just consuming electricity — it is consuming its own ROI.

- **Routes are constrained to 160–220 miles per day, limiting load acceptance**
- **Mid-day slow charging means lost driver hours and stranded asset capacity**
- **Scaling from 10 to 50 EVs requires \$150,000–\$500,000+ in costly BTF charging improvements**
- **Complex city permitting requirements can extend project timelines and slow fleet electrification**
- **Utility interconnection queues of about 18–36 months delay fleet deployment**
- **Unpredictable dwell times (especially at ports) can eliminate second and third daily loads**

The BTF Ceiling in Practice

A 25-truck, BTF-only fleet operating at 180 miles/day generates roughly \$2.3M in annual revenue. That same fleet, enabled by public charging could generate \$3.5M — with no additional drivers or trucks.



More Miles. More Loads. More Revenue.

The premise is straightforward: use BTF charging as the foundation, and public high-power corridor hubs as the force multiplier. The result is a fleet that captures the cost efficiency of overnight charging while unlocking the revenue upside of diesel-comparable utilization.

By utilizing high-power CCS charging through a public charging network, a fleet can unlock an extra ~50–70 miles of range during a driver's mandatory 30-minute HOS break. No additional drivers. No extra trucks. No schedule changes.

Revenue per Truck Beats Cost per kWh

The most common objection to public charging is cost-per-kWh. It is also the wrong metric. The question is not "what is the cheapest electricity?" — it is "what is the highest net revenue per truck?" The following comparison uses real-world operating assumptions per Class 8 truck.

Even though energy costs more in the BTF + public charging model, the net revenue increases by 57% — from \$90,000 to \$141,000 per truck, per year. For a 25-truck fleet, that is ~\$1.2M in additional annual net revenue without adding assets.

Metric Per Truck	BTF Only	BTF + public charging
Annual revenue miles ¹	45,000 miles	75,000 miles
Annual gross revenue (@ \$2.50/mi) ²	\$112,500	\$187,500
Blended energy rate ³	~\$0.25/kWh (BTF)	~\$0.31/kWh (BTF + public)
Annual energy spend ⁴	\$22,500	\$46,500
Net revenue ⁵	\$90,000	\$141,000
Truck cost recovery ⁶	5 Years	3.2 Years
Net revenue multiplier ⁷	1.57x	
Net revenue lift ⁸	57%	

1. Annual revenue miles are based on NACFE Run on Less reports which assume 180 miles/day for BTF Only and 300 miles/day for BTF + public charging, both with 250 operating days/yr. $180 \times 250 = 45K$ and $300 \times 250 = 75K$
2. Revenue calculations assume a national avg. freight rate of \$2.50 per mile, consistent with ATRI, DAT Freight & Analytics, and ACT Research market benchmarks.
3. \$0.25/kWh is a CA average commercial rate per U.S. Energy Information Administration (EIA). Blended rate \$0.31/kWh assumes 60% BTF charging at \$0.25/kWh and 40% public DC fast charging at \$0.40/kWh, per DC fast charging avg rate from EV Charging Stations.

4. Assuming 2 kWh/mile, $45,000 \times 2 \times \$0.25 = \$22.5K$ and $75,000 \times 2 \times \$0.31 = \$46.5K$
5. Annual gross revenue minus annual energy spend
6. Assumes average cost of a class 8 battery electric tractor (\$450K) divided by net revenue and does not consider other factors such as incentives, financing, depreciation, residual value, maintenance savings, and discounted cash flows.
7. Revenue multiplier is BTF + public charging net revenue / BTF Only net revenue
8. Net revenue lift is $(141,000 - 90,000) / 90,000 = 57\%$

Risk Mitigation for Fleet Electrification

Beyond helping fleets unlock additional revenue-generating miles, public corridor charging also serves as a critical risk mitigation strategy for electric fleet deployment.

Reduce Financial and Stranded Asset Risk

Public corridor charging helps fleets avoid overbuilding infrastructure before utilization is proven. Rather than making large capital investments in depot infrastructure based on evolving freight operation needs, fleets can leverage public charging to scale incrementally and align charging capacity with actual demand. This reduces the risk of stranded assets, preserves capital, and helps fleets avoid investing in infrastructure that could become outdated as megawatt charging systems and next-generation vehicle platforms come to market.

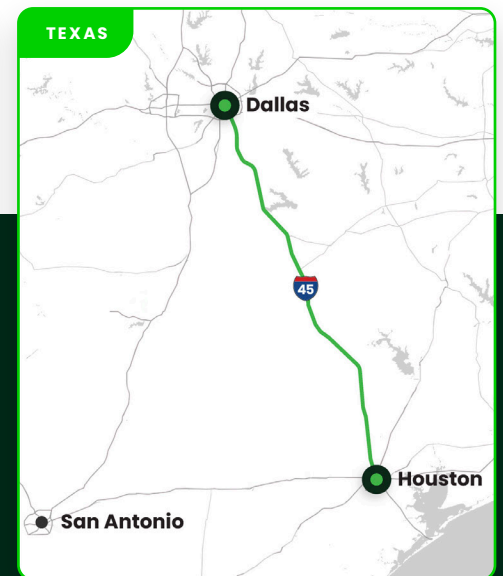
Reduce Operational Risk

Access to a reliable public charging network gives fleets critical redundancy during utility outages, equipment failures, maintenance events, unexpected fleet growth, or shifts in customer demand. By supplementing depot charging with strategically located corridor charging, fleets can maintain service levels, improve resilience, and support business continuity with greater confidence.



Why Greenlane: The Public Corridor Charging Advantage

- Strategic placement along high-volume freight corridors and port locations to support drayage, regional haul, and long-haul freight across state lines
- Support both CCS & MCS (Megawatt) and will include Tesla chargers for ultimate truck model interoperability and flexibility
- Access to integrated fleet management tools, including Fleet Portal, Driver App, and API integrations for enhanced visibility, planning, and operational control
- 99% uptime with 24/7 live on-site support attendant and security
- Ability to reserve charging to reduce wait times and optimize fleet operations
- Available offices and parking for easy slip seating, drop & hook relay (certain locations)
- Network effect: unlike others, we're actively building a nationwide network connected by our tech ecosystem, not just standalone sites.



Ready to Unlock Your Fleet's Full Revenue Potential?

Connect with Greenlane to discuss corridor access, fleet integration, and deployment timelines for your operation.

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