

Automated Oversized and Overweight Truck Permitting

The Troubling Reality of Overweight Trucks¹

The nation’s economy is increasingly reliant on trucking, with volumes growing 6.6% in 2018 alone. With demand high, some are tempted to overload their vehicles beyond set standards, which can translate into an extra \$100,000 or more per truck.

These oversized and overweight vehicles have substantial hidden costs, and existing permitting schemes only cover 1/5th of them. Roadway degradation correlates exponentially with vehicle weight—a **single overweight truck causes more roadway damage than 10,000 cars.**

This extra weight makes trucks more dangerous, increasing stopping distance 25% per additional 20,000 lbs—**overweight trucks are 50% more likely to be involved in a fatal crash.**

¹ Sources: Texas Dept. of Ag., FHWA, U. of Michigan, UT Austin

Streamline Permitting and Compliance with ClearRoad

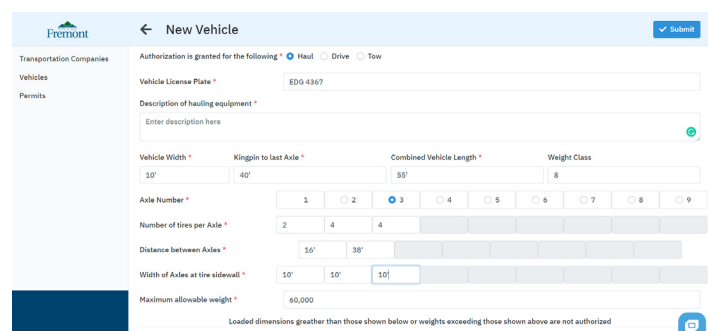
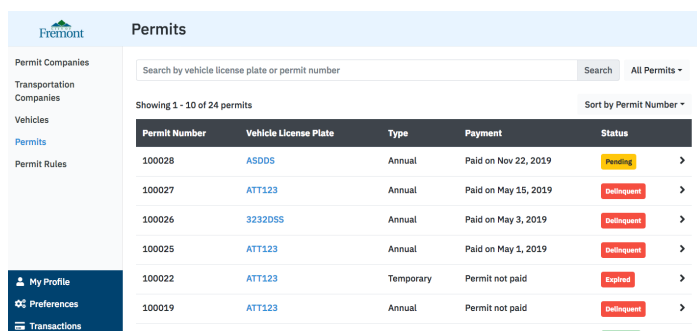
ClearRoads Permitting Platform streamlines all aspects of the permitting process. The platform lets:

- *fleet managers* obtain permits online
- *city managers* quickly review permit requests
- *traffic engineers* validate routes interactively
- *police officers* better enforce permits

Implementing the Platform is expected to yield:

- Increased permit compliance and reduced overloading rate by 30%.
- Processing time & overhead cut by 50%
- Significant reduction in damage to the pavement and improved resident safety

The estimated total value of these benefits is between \$120k to \$180k a year for a city of 75,000 inhabitants



Screenshots of Permit Manager and Fleet’s Interfaces on ClearRoad’s Truck Permitting App



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Case Study – Fremont, CA

Fremont, CA looked to ClearRoad for help in managing increasing heavy freight within the city. The primary pain points were:

A manual & analog permitting process that has not changed in a generation. Previously, permit applications were filled by hand and sent via fax or e-mail, fleets mailed checks or paid their fee at the counter, and permits were tracked with Excel.

Text-based truck routes opened the door to costly human errors. Traffic engineers were approving permit routes based on manual descriptions of street names and crossing.

Police officers could not access the permit database. Verifying a permit required a call to the permit manager. Since most oversized trucks traveled outside regular business hours, police officers had no way to verify a permit.

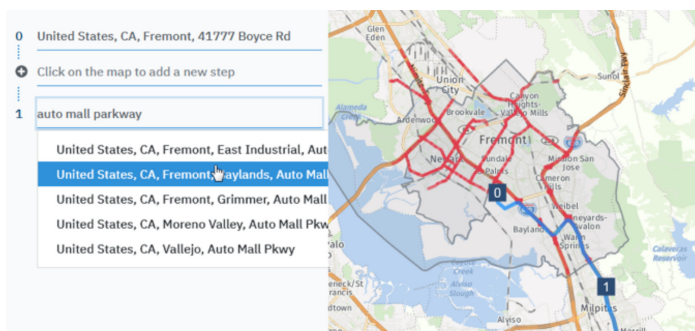
Lack of awareness of authorized routes led to unintentional violations. The city was missing a simple tool to explain authorized truck routes and regulations to the trucking community.



ClearRoad’s Freight Solution for Fremont:

ClearRoad worked closely with personnel from the Fremont’s Public Works and Police Departments alongside local fleet managers, to tailor the permitting platform. Key components are:

- **Truck Permitting Portal** – A web-based interface for owner-operators or fleet managers to obtain permits, pay fees online, review authorized truck routes, and submit trip journeys via a map
- **Permit Management Dashboard** – A cloud-based dashboard for city employees to review and approve submitted truck permits
- **Compliance Lookup App** – An in-vehicle application for police officers to validate a truck’s proper permitting, 24/7



Screenshot of Truck Route Selection App for Fremont



“Collaboration with ClearRoad has been smooth throughout the process. The result has exceeded our expectations.”

Sheila Marquises,
Senior Transportation Engineer,
City of Fremont