

## Northern California Supply Chain Optimization – A New Route to Great Savings

**Environmental and Human Health Impact:** Reduced fuel consumption by 18 percent and CO<sub>2</sub> emissions by approximately 450,000 lbs.

**Business Impact:** Route consolidation and reduced fuel consumption generated a \$700,000 savings in less than 12 months.

### Challenge

In Kaiser Permanente's Northern California Region (NCAL), our distribution of materials is managed by both an internally owned-operated distribution center and fleet and an external distribution partner. At times, this has meant duplication of distribution routes resulting in wasted fuel, added costs, and unnecessary congestion at facility loading docks.

### Aim/Goal

- To optimize fleet usage and routing in order to more efficiently distribute goods to and among facilities in NCAL.

### Team

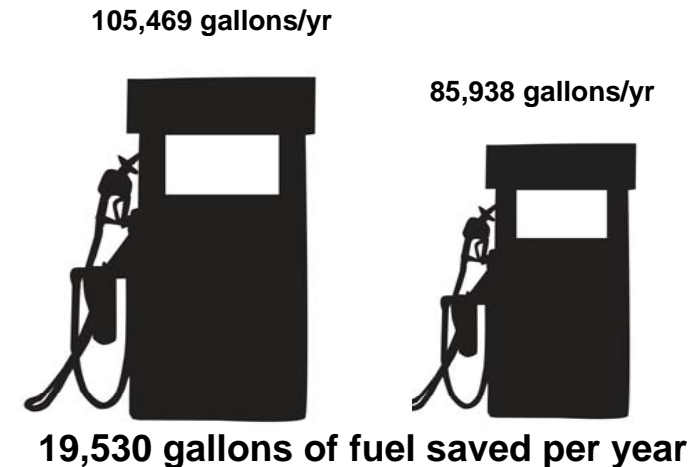
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### Actions Taken

- ✓ Partnered with distribution specialists to evaluate various costs associated with Kaiser Permanente's proprietary supply chain, including the cost of inaccurately picking and shipping supplies and running internally and externally-managed fleets concurrently.
- ✓ Among other findings, research uncovered that:
  - Kaiser Permanente trucks were leaving the distribution center 45 percent full.
  - Kaiser Permanente and our partner's fleets were often duplicating routes.
- ✓ Equipment and software were secured to assist with real-time route optimization.
- ✓ In addition, freight consolidation (cross-docking) and increased pallet height were employed to facilitate greater fill-rates for trucks.

### Results

The first phase of the project uncovered the opportunity to eliminate five distribution routes in the beginning of 2009. This will yield cost savings of \$700,000 and a reduction of approximately 450,000 lbs of CO<sub>2</sub> emissions annually.



### Lessons Learned

- ✓ In the past, supply chain efficiency initiatives have been focused on expediting and tracking product delivery from the loading dock to the point of use.
- ✓ This project uncovered low-hanging cost savings opportunities in the supply chain when product moves from distribution centers to hospitals and medical office buildings.

### Next Steps

- ✓ The Northern California distribution center and supply chain is evaluating all fleets to identify additional routing and fleet optimization opportunities.
- ✓ Plans include adding courier routes from outside vendors and back-hauling freight through a central distribution center to eliminate medical facility visits by individual suppliers.