

## Customer Success Story

# Mobile Resource Organization

## Building a More Productive Mobile WorkForce with Descartes

Tracking field personnel is an integral part of ensuring the highest quality customer service and support for any large scale service operation with a mobile workforce. Having real-time insight into field operations is also an essential foundation for improving productivity, reducing costs and ensuring overall efficiency.

This was the challenge facing a large service company. The company consisted of a mobile work force of 3,000 field technicians, 40 district offices and a diverse customer base of over 500 leading utility, telecommunications and private infrastructure companies throughout 20 states. While the company had systems in place to monitor and assign internal workflow activities, it had little visibility into a technician's daily routine during their working hours.

Supervisors would assign up to three days' worth of work orders via laptops used by field technicians. Jobs were prioritized by technicians based on their location, due time and the type of work involved. Managers had little insight into what jobs were being done first, or were completed or delayed until the end of each day.

Assessing productivity was equally problematic as technicians were required to report on their own progress, leading to inaccuracies and in some cases, inflated hours for shorter jobs. Since field personnel are paid hourly, productivity was measured by the number of completed work orders in an 8-hour day. Ultimately managers had little insight into true productivity numbers, making it difficult to identify areas that required improvement.

To address these concerns, the company made the decision to implement a comprehensive, on-demand routing and mobile workforce management solution from Descartes. Recognizing that a full-scale implementation at the outset would be too complex, the company chose a phased approach to implementation, beginning with installing a GPS-based tracking system in all vehicles and using it for compliance monitoring and comparing actual versus reported hours and routes. Once this portion was completed, they could move on to Phase 2, which would build on the solution's capabilities to include routing and work order sequencing.

## Gaining Insight Through Web-Based Services

Phase 1 began by implementing a passive fleet management system on all trucks, which involved installing a black box GPS device in all company vehicles to monitor activities in real-time. With this device attached to each vehicle, managers can go to a tracking website throughout the day to track, locate and monitor field personnel in real time. This information is also integrated with the internal workflow order management system data for comparison and reporting.

The initial phase was launched starting with 15 vehicles in one district. Three months later, phase one extended to 64 vehicles in three districts. Initial positive results led to a district-wide rollout five months later.

## Real-Time Results with On-Demand Tracking

With the Descartes solution, supervisors now have real-time visibility into where all the technicians are and for how long. They can also compare the “breadcrumb trail” provided by the GPS devices and end of day reporting to ensure accuracy. This information can then be used to generate online reports that individual supervisors can use to explain exceptions and pinpoint potential problems.

Within a very short period of time after the initial pilot began, the company reported 10% productivity gains and labor savings, which exceeded their targets. It also experienced significant fuel savings since the system provides visibility into idling time, among other elements that might consume fuel resources unnecessarily.

Visibility into activities also provides a safer work environment for technicians. Supervisors now know how fast technicians are traveling and whether they are at a site for an extended period of time, ensuring that company assets are safe at all times. They can also determine if a safety alert call (emergency numbers are printed on all trucks) is legitimate, since they know the exact whereabouts of each vehicle.

Unannounced site visits are also an integral part of the organization’s safety audit procedures, and must be performed for each employee every month.

With the monitoring piece in place, the organization is now set to leverage the Descartes solution to begin the routing and work order sequencing portion of the project with Descartes Route Planner On-demand. This will enable the organization to plan, optimize, dispatch routes, track and monitor service fleets in real-time, while taking into account geographic zones, time windows and other physical constraints. Plans are to implement the new capabilities when the Phase 1 rollout is completed.

## Summary

### Challenge:

A large mobile work force company needed real-time visibility into the day-to-day activities of more than 3,000 technicians in the field in order to reduce costs, and improve productivity and safety.

### Solution:

A customized Descartes on-demand fleet management solution has enabled the organization’s managers to track technician activity, perform site audits and compare reported versus actual hours.

### Benefits:

- 10% productivity gains and labor savings
- Improved reporting accuracy and productivity
- 14% fuel savings through reduced idling times
- Reduction in false safety alert calls
- Improved worker safety