Industry Solution

Setting the Standard in Patient Care and Clinical Quality

For 25 years, Alliance Imaging has been providing hospitals, physicians groups and other health care providers with diagnostic medical imaging services for MRI, PETCT, CT and Radiation Oncology. The company performs more than one million scans annually, operates 550+ imaging and radiation therapy systems (of which 400 are mobile), has 10 offices and three warehouses, and provides service to more than 1,200 clients in 46 states.

Of its 2,300 team members, 200 are drivers responsible for moving Alliance’s mobile imaging trailers from one facility to another, at night, to ensure units are ready to operate for patients the next day. Client agreements for mobile imaging services can be as short as 4 hours to as long as 30+ days. Alliance’s fleet of mobile trailers completes 61,000 deliveries annually.

Inefficient Route Plans Drive up Costs

Routes for Alliance’s fleet of mobile imaging units were being created manually. They were also based on personal preference instead of driving efficiency. According to John Millen, Director of Logistic Operations at Alliance, “We had 20 people across the country consumed with details on which truck and what driver was going to complete which move. The biggest issue, however, was that the route plans were not created with the needs of the business in mind.”

Alliance had limited visibility as to how many hours and miles each route should use, so the company could not pinpoint exactly how many trucks and drivers it really needed. To achieve optimal efficiency and standardize its processes across the country, a full reorganization of its fleet management was in order.

Initially, Millen believed an outsourced logistics model was the way to go. “We met with some industry leading transportation companies, but they struggled to understand our unique business model. Plus, our operational costs would increase by as much as $3 million if we used them.”

While weighing his options, Millen had an epiphany, “Rather than outsourcing our transportation needs, we could implement the same route optimization tools and standardized processes that trucking companies use to ensure their operations are efficient.”

“Before Descartes, we did not have visibility into how many hours and miles each route would consume, which meant that we didn’t know how many trucks and drivers we really needed. We can now staff our operations accordingly.”

John Millen,
Director of Logistic Operations at Alliance
Understanding the Business Model

Millen narrowed his evaluation of ten routing solution providers down to four, before deciding to implement Descartes Route Planner. “We realized that Descartes was the one provider that truly understood our model, and their Route Planner solution could address our needs today and into the future.” Descartes Route Planner is powered by NAVTEQ®, the leading global provider of digital map, traffic and location data that enables navigation and location-based platforms around the world. It provides optimized plans and represents accurate routing by using NAVTEQ map data. NAVTEQ’s processes and infrastructure — including a worldwide office network, nearly 1,000 locally-based geographic analysts and unparalleled in-field collection and validation capabilities — have established NAVTEQ maps as the quality benchmark for the industry.

Once the implementation began, Alliance executives realized how many different layers and silos existed within the organization. To achieve optimal results, the company had to streamline its internal processes. “We previously had people creating schedules on the back of napkins or using simple spreadsheets or word processing tools,” explains Millen. “Our dispatch team members and drivers also used language that worked for them, but which no one else understood. Plus, staff members in different parts of the country were also using processes no one else was familiar with. We knew that it would take time to get everybody on the same page.”

Plan the Work; Work the Plan

70% of Alliance deliveries are set up based on long term contracts; the remaining 30% are scheduled on a week-to-week basis. Orders are fed into the system two weeks in advance. The following Tuesday, routes are optimized and resources are validated (taking into account driver and tractor availability, vacation schedules, equipment replacements, etc.). Schedules are then run on Wednesday, and teams are notified by Friday as to their routes for the following week.

Drivers get a printed schedule, and jobs are also dispatched over mobile phones. According to Millen, “We want to eventually go to an on board computer in each truck, but for now this is the easiest way to ensure printed and electronic schedules match.”

Summary

Challenge:
Manual routes created based on personal preference instead of driving efficiency are compounded by the lack of visibility, driving up Alliance Imaging’s operational costs.

Solution:
Descartes Route Planner, powered by NAVTEQ map data, takes the guess work out of scheduling 61,000 deliveries annually. By providing much needed visibility into how many hours and miles each route requires, Alliance operations are always staffed accordingly.

Benefits:
- Went from 20 people creating route plans to three
- Cover the same amount of moves with fewer assets
- 10% increase in asset utilization
- Reduction of 15 miles traveled per delivery cuts fuel, maintenance, wear/tear costs
- Previously overstaffed, Alliance has now reduced labor costs by 10%
- Alliance team spends more time planning, less time putting out fires
- Fixed cost reduction from improved driver and tractor utilization of 1.2 million
- Variable cost reduction in miles traveled from improved average miles per move is $570,000
- 2008 total benefit directly attributable to Route Planner is $1.77 million