

Knight Waste Services Optimizes Service Quality

Greater intelligence gathering capability optimizes Texas fleet operations.

■ By Martin Demers and Bryan Dodds

Knight Waste Services (Knight), a family owned, medium-sized residential collections company, was established in 2003 to service the City of Fort Worth's residential garbage and recycling collection. Knight operates 30 Automated Side Load (ASL) trucks—four of which are diesel and 26 of which are compressed natural gas (CNG)—providing weekly curbside collection for 94,000 residential households in Fort Worth, TX.

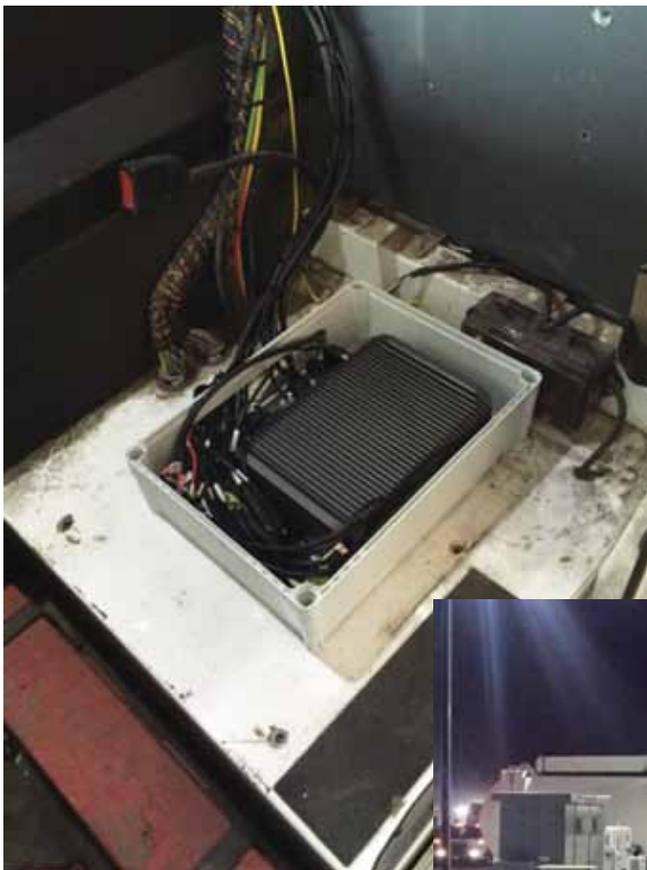
Challenges

As part of their ongoing drive to optimize service quality and achieve the performance targets established by their municipal

partner, Knight realized that they needed much more detailed and comprehensive fleet monitoring and data collection capabilities. Specifically, Knight wanted to be able to better automate the processing of routes for enhanced efficiencies, gain real-time views into driver behavior to help mitigate personnel issues, improve overall monitoring of collections activity for service assurance, gain video and photo evidence of any issues, and increase the level and scope of reporting capabilities.

Choosing a Solution

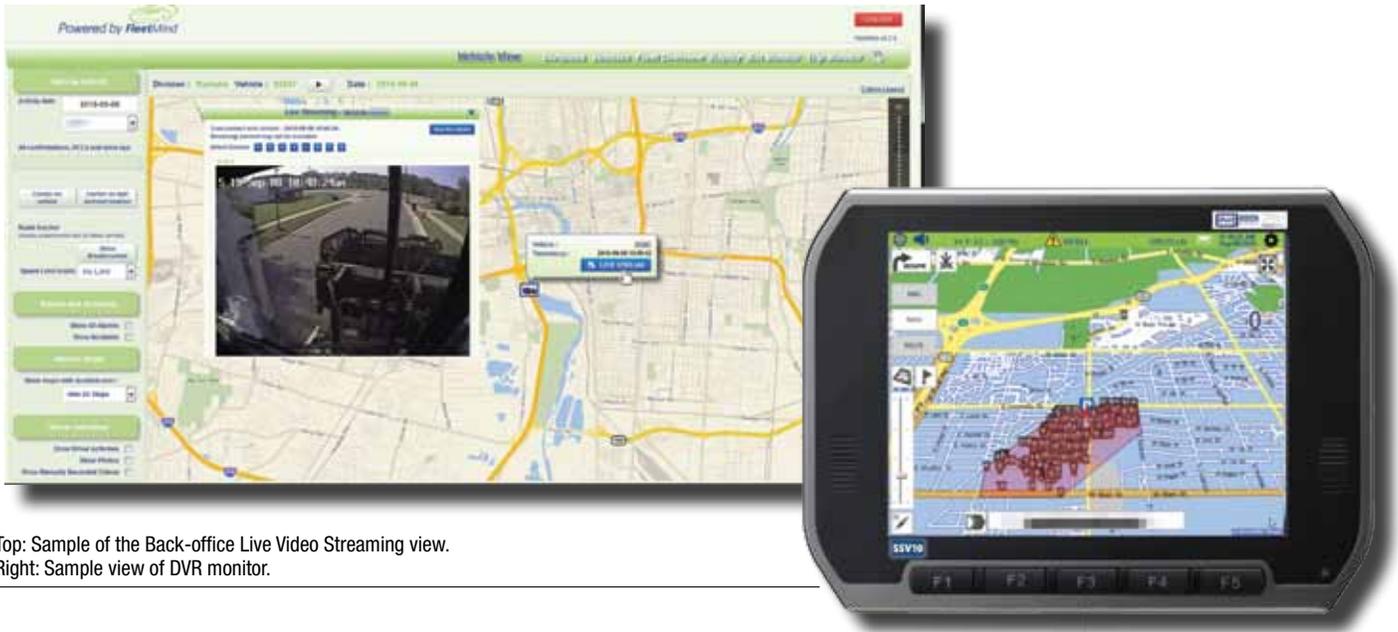
Knight researched numerous fleet management technology



Knight Waste built-in DVR.
Images courtesy of Fleetmind.

Knight Waste fleet operations area.





Top: Sample of the Back-office Live Video Streaming view.
Right: Sample view of DVR monitor.

options in their search for a comprehensive and fully-integrated solution before selecting the Street Smart Vision by McNeilus SSV10 system, an onboard computing solution powered by FleetMind. The FleetMind mobile on-board computer and DVR platform for the SSV10 system enables an extensive list of software features, including:

- All of Knight's desired capabilities integrated into one solution
- Real-time connectivity with in-cab touchscreen smart display
- Expandability for up to eight mounted cameras around each truck
- Virtual 360-degree view around each vehicle
- GPS tracking with playback
- Turn by turn driver direction for optimized routing
- Multiple back-office reporting features

Testing the Solution

As a first step, Knight conducted a pilot test of the McNeilus/ FleetMind solution on a subset of fleet vehicles to ensure ease-of-use and desired outcomes. The pilot test was implemented on two trucks for a period of approximately three months. Knight quickly determined that the system would be of significant value for improving efficiencies in their operations, allowing for remote viewing of problematic behaviors, and enabling more effective accident and incident investigations. The SSV10 system pilot project satisfactorily proved the viability of key features and capabilities, and provided much expanded visibility into fleet operations.

Today

Knight recently completed a fleet-wide system install on all of its McNeilus ASL trucks, including the applicable software training for its users. The SSV10 system brings together an in-cab monitor, a mobile onboard computer and a DVR platform that integrates with a number of software features. Route management software optimizes the routing process, reduces maintenance costs, and helps reduce fuel consumption and GHG emissions. Up to eight cameras provide drivers with a 360° view around the truck, and tracking software empowers managers with real-time insights into driver and truck behavior with fully integrated video. This enhances fleet safety as follows:

- Monitors drivers in real-time to ensure adherence to expected guidelines and behaviors.
- Collects image-based evidence with real-time video feed and archive/playback capability, which is very valuable for incident investigations. By making accident investigation more accountable and accurate, the SSV10 system has already saved Knight thousands of dollars in potential claims and dozens of man-hours in investigation.
- Interfaces readily with different reporting applications that provide vehicle metrics, collection cycles, collection data by customer location and more.
- Enables better driver coaching by allowing remote viewing of problematic behaviors for timely intervention and remediation.

Says Richard L. Knight, Vice President and Chief Operating Officer for Knight Waste Services, "Implementing the SSV10

system will help us verify to the City of Fort Worth that customers are being serviced and provide them with that information in real-time. The system will also enable us to document activities and incidents with video and photos, significantly reducing our liability. Just as importantly, we are looking forward to better managing our fleet operations and customer service as a result of the information the SSV10 system makes available to us. In my opinion, it has proven to be the 'most complete' technology solution for our needs." | **WA**

***Martin Demers** leads FleetMind (Montreal, QC), a Safe Fleet brand company, as vice president and is a long-time technology industry executive. Under his leadership, FleetMind has grown into a leading on-board computing (OBC) solutions provider for waste and recycling fleets. Martin has often been published in industry publications including FleetOwner Magazine, Trucking Info Magazine and RFID Journal. He is a frequent speaker at technology and waste management events. Martin can be reached at mdemers@fleetmind.com.*

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Knights Waste in-cab smart display.

