UPS ORION brings efficiency and service to new level UPS’s On-Road Integrated Optimization and Navigation (ORION) is proprietary routing software that uses package-level detail and customized online map data to provide drivers with optimized routing information. ORION can enhance customer service and reduce the numbers of miles driven by determining the most efficient delivery route.

Arguably the world’s largest operations research project, ORION uses fleet telematics and advanced algorithms to take route optimization to a new level. In 2013, UPS began the first major deployment of ORION, with plans to deploy ORION to all 55,000 North American routes by 2017.

**Developing ORION**

* ORION is a part of UPS’s commitment to continual investments in operational and customer technologies, which total approximately $1 billion a year
* In order to gather the data necessary to develop the ORION program, UPS installed GPS tracking equipment and vehicle sensors on UPS delivery trucks in 2008
* UPS’ proprietary ORION algorithm equates to nearly 1,000 pages of code and evaluates more than 200,000 alternative ways to run a single route
* The number of route combinations a UPS driver can make in a day is far greater than the number of nanoseconds the earth has existed.
* ORION uses more than 250 million address data points

**Testing & Deployment**

* UPS prototyped the ORION technology at 11 different sites between 2008 and 2011
* UPS has 700 employees dedicated to the ORION deployment
* ORION was deployed to 10,000 routes and 82 facilities in 2013
* In 2014, 24,000 routes will be optimized with ORION, nearly half of all US routes.

**Measuring results**

* Estimated savings during the prototyping and testing of ORION between 2010 and 2012 totaled 3 million gallons of fuel and 30,000 metric tons of CO2 emissions
* In 2013 alone, UPS predicts the savings from ORION result in reductions of more than 1.5 million gallons of fuel and 14,000 metric tons of CO2 emissions
* A reduction of one mile a day per driver ultimately saves up to $50 million
* At full U.S. deployment, ORION will process tens of thousands of route optimizations per-minute based on real-time information