Best Features You Should Look For in Routing and Mapping

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> In today's technology world, THERE ARE MANY MORE OPTIONS FOR A "PAPERLESS" ROUTE SOLUTION IN-VEHICLE. Buying a software product that provides fully integrated mapping and multiple routing options combined with paperless solutions provides many benefits.

INCREASING PRODUCTIVITY AND MAXIMIZING profitability are more important today than ever. This article will touch on some key factors relating to routing and fully-integrated mapping features that can assist to achieve these goals.

Optimization

The term "optimization" in routing is loosely used in conjunction with provision of routing efficiencies. While optimization can improve overall route time, it should be viewed simply as a starting point to make improvements. Factors such as traffic delays, timed arrival stops, etc. can change the picture considerably. However, using a product that provides optimization will give you an excellent benchmark of how route time can be improved and can be compared against routes prior to running optimization for comparison of benefits.

Route Statistics

A system that provides detailed dynamic tracking of route times and statistics is valuable in calculating route profitability. While an accounting package provides profit and loss information, it cannot drill down at a route level as to how profitable each route is for your business. Capturing information including: costs related to pro-rated revenue, service revenue, disposal cost, disposal revenue, driver cost, fuel cost and vehicle costs, gives a clear picture of overall profit on each route and ensures routes are as efficient as possible and brings any issues to the forefront.

Multiple Route View/Overlaps

Routing efficiencies in a product should include the ability to ensure your drivers are not passing each other. Having the ability to view multiple routes on the map at the same time will provide a visual check to ensure stops are in the best positions and whether there is benefit to moving a stop(s) to ensure the route is at maximum efficiency.

Map Views

A map driven system provides many visual pictures at a glance of how efficient routes are and
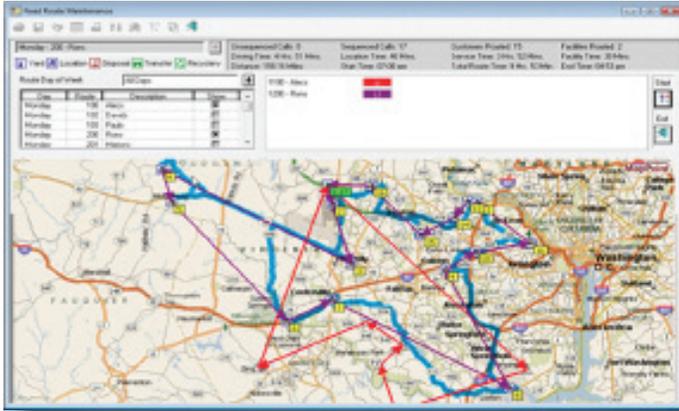

Visually locate proximity of closest customers/easily identify most efficient route for a customer.
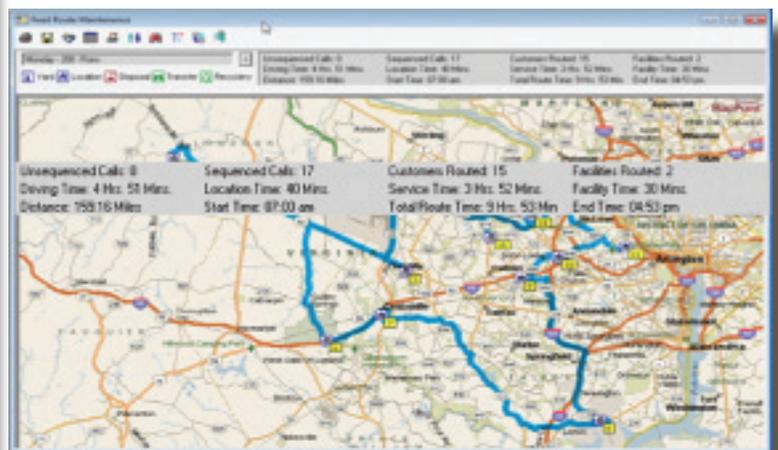
Optimization assists to improve overall route time.

Images courtesy of RouteOptix.

View up to 18 routes on the screen to ensure your drivers are not passing each other.

GPS is one option for providing a paperless route and live date/time stamps.

when changes are made. For example, you may need to travel a significant distance to service a customer. When adding this customer to a route, you should have the ability to determine how much this will cost you in time and distance to satisfy this request and make an informed decision whether it will be worthwhile for your business. In addition to statistics about distance travelled, having the ability to visually look at where all your customers are located on a map has a benefit as you can pass this information to your sales staff and have them work on building sales density in areas where this is applicable. Another benefit is the ability to visualize routes and show estimated route times and statistics changing dynamically as calls are added, moved and deleted.

Latitude and Longitude

The ability to use latitude and longitude is crucial for companies servicing rural addresses or locations where a street address or position is not available. Being dependant on physical address information in a system can limit routing capabilities considerably in these situations.
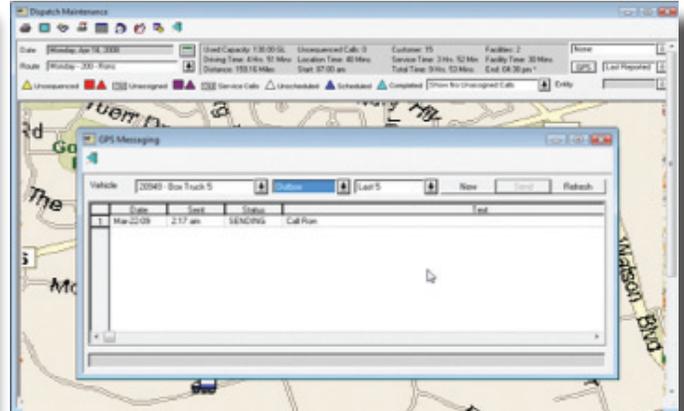
Best Route for a New Customer

Providing the ability to visually locate the proximity of the closest customers to a new customer enables customer service and/or dispatch to identify the best route on which to place the new customer. A decision can be made quickly and efficiently from the first point of contact with the new customer as to choices when you will be in his area and the best time to service him.

Different Types of Routing

Flexibility is the key for your business. If you need to provide both regularly scheduled and on-call routing, ensure the system you choose has the capability to provide both types of routing.

A Paperless Route Solution

In today's technology world, there are many more options for a "paperless" route solution in-vehicle. Purchasing a software product that is fully integrated to a GPS system for example, provides many benefits. Instead of printing a paper route sheet for your driver each day, you now have the flexibility of uploading a route directly from the back office application to the vehicle. This will provide a live date and time stamp in the software application of when calls were completed which can then be updated to production statistics and reporting information. Navigation is also provided with GPS options. Another option is to have the route available on a hand-held device for services, pickups and deliveries. There are certain devices that can also provide phone capabilities as well as the option to have either live or batch updates into the software application. Other options include the ability to have receipts printed, capture signatures and scan bar codes. Running a software application on a n in-vehicle, cost-effective, rugged tablet device allows for mapping and directions regarding the route which, again, can either be updated live or at the end of day into the software application.

Providing the Most Efficient Tools

The old adage "a picture is worth a thousand words" says it all—you can instantly visualize your customers, services, etc. on a map. Whether you are changing, adding or deleting stops, being able to see the effect of those changes in terms of route statistical information and calculation of route profitability is important. Having the ability to visually ensure your drivers are not passing each other also assists to ensure your routes are as efficient as possible. Providing your dispatchers with tools to quickly assess the best route on which to place a new customer presents your company as competent and proficient. Paperless solutions such as GPS, hand-held devices or tablets provide further efficiencies when integrated to a back office software. | WA

Ron Davey is President of RouteOptix Inc (Kitchener, ON). He has been developing vehicle routing and mapping software applications for 30 years. In 1980, Ron worked in the solid waste industry for many years and co-wrote software for a large solid waste organization. In 1990 Ron was hired as a consultant and wrote software for a solid waste technology company. In 1998, Ron recognized the need for software to service other vertical markets with similar challenges to the solid waste and recycling industries and designed his own vehicle routing and mapping application that was released in 2000. The creation of Ron's company, RouteOptix Inc. coincided with this release. RouteOptix services solid waste, scrap metal industry, liquid waste, medical waste, recycling, grease, oil recovery and document destruction industries. Ron can be reached at (866) 926-7849, via e-mail at info@routeoptix.com or visit the Web site at www.routeoptix.com.