

white paper: route balancing

INDUSTRIAL LAUNDRY & LINEN SUPPLY



10 SECRETS OF SMARTER ROUTE BALANCING

By Chris Sciora, President & Founder

How to Make Improving
Delivery Routes a Pain Free Experience

Table of Contents

Summary	3
Understanding Fleet Efficiency.....	3
The 10 Secrets of Smarter (Not Harder) Route Balancing	3
1. THE IMPLEMENTATION PLAN	3
2. MAPPING & ROUTE MANAGEMENT TECHNOLOGY.....	4
3. BILLING SYSTEM REPORTS	4
4. CUSTOMER, DELIVERY AND PRODUCT VALIDATION	5
5. FLEET MILEAGE TRACKING	5
6. ROUTING PARAMETERS	6
7. MULTIPLE SCENARIOS	6
8. THE 7'S TRICK FOR SEQUENCING.....	7
9. ROUTING NEW ACCOUNTS	7
10. CUSTOMER NOTIFICATION IDEAS	8
About MobileIQ.....	8
Additional Resources	8

Report Summary

These "10 Secrets of Smarter Route Balancing" came from the toughest and best kind of teacher: real world experience. Unless you've done hundreds of these types of projects, chances are high that you'll find an idea that will save you time, money and/or a bunch of avoidable headaches. The benefits of balancing the routes regularly are too large to ignore – do it smarter, not harder!

All of these ideas are taken directly from MobileIQ's Route Balancing Project Guide. The enclosed coupon provides directions for downloading a complimentary copy from our website.

Understanding Fleet Efficiency

Route balancing is about increasing overall fleet efficiency by making changes to the current route architecture. For most fleet managers, this often means eliminating vehicles and/or route days to reduce territory overlap and consolidate low-performing routes. Or adding additional vehicles and/or route days to handle excess volume. Many industries even have terms that directly reflect this philosophy - route adjustment, rerouting, route splitting. All imply changing the number of vehicles.

However, major changes aren't always required to greatly improve fleet efficiency and develop better route management standards. That's why we prefer the term "route balancing" when thinking about making route changes. Some of the most effective projects we've completed didn't add or remove a single vehicle from the fleet. It's possible to reduce fleet mileage by up to 20% without eliminating any vehicles.



Tip: Project goals could be balancing hours and/or commissions across existing routes; resequencing existing route days (no retagging is required); switching from 5 day weeks to 4 day weeks; opening or closing depots; creating specialty routes (dust, medical, bulk); selling low-profit accounts or integrating newly acquired business.

The 10 Secrets of Smarter Route Balancing

1. *The Implementation Plan*

Start with the 'Go Live' date when the new routes will start running. Depending on the amount of route changes involved, this could be 30, 60 or 120 days (or longer) from the project start. Everything else in the game plan schedule works backwards from this date, so it's critical to write it down and share it with everyone.

Here's a few things to consider:

- ☑ Impact on the production facility. Most companies will be changing merchandise while continuing to make deliveries. It might takes weeks or months to have all COGs returned for processing.
- ☑ The total number of garments that will require retagging. This can be minimized by working around large uniform accounts and keeping the existing route day assignment. Companies that don't use man-readable tags on merchandise can implement changes more easily, otherwise plan on hiring additional staff and labeling equipment to complete the job.
- ☑ Updates to manual route books. If you're not using printable route books, computer software or portable navigation units, allow additional time for the drivers to write down new driving directions.

2. Mapping & Route Management Technology

There are many inexpensive (and even free) mapping services that can help find customers in a flash. Some of the more popular services are Google Maps, MapQuest, Microsoft Live Maps and Yahoo Maps. These are all much better than traditional desktop software such as Microsoft Streets & Trips for locating customers.

Online mapping offers:

- satellite overlays showing incredible levels of detail
- frequent updates to the mapping data
- unlimited number of users can work simultaneously to locate customers

You can also look into using dedicated route management or logistics software. MobileIQ developed the **Headlight Route Planner™** to simplify route maintenance and most of the tasks involved with completing a route balancing project.

3. Billing System Reports

It's much easier to work with digital route data than with printed reports. Contact your vendor and ask them how to export data into Excel (CSV) format or to send you a file. Most vendors can do this easily and are happy to help out. This file will make life much easier all around and can be imported into the mapping software.

For companies using GPS or handhelds, you can usually get a report that shows actual premise times for each stop. This is a great time-saver when trying to estimate stop times. For better accuracy, we suggest averaging times from the last 3 or 4 deliveries to avoid getting misleading times from a single large delivery.

Finally, Headlight can easily import customer, delivery and product information from most industry billing systems through Smart Sync™. This is a universal standard created by MobileIQ that allows vendors to provide the necessary information using a common file format. Smart Sync™ can even receive automated transfers from the billing system on a daily or weekly basis.

4. Customer, Delivery and Product Validation

Before getting into the nuts and bolts of routing, take the time to make sure the right data is being used. Are all the active accounts present? Should suspended accounts or will calls be included? Are the product quantities and revenue both reasonable AND accurate? Are all the necessary routes and days being considered for the project?

If there are any major discrepancies, stop and figure out what's wrong. The easiest approach is spot checking a handful of accounts from different routes, preferably ones that get different types of products. Compare this information to the route accounting system invoices and make sure everything matches properly.



Tip: Don't spend time updating customer addresses in the billing system – it's not necessary. Modern mapping software allows customers to be correctly located even if the address is partially incorrect or even missing entirely. The key is to find someone such as a salesperson, service manager or driver who has actually made a delivery and use their local knowledge of the area.

5. Fleet Mileage Tracking

It's important to establish baseline metrics for the current routes. Many companies track daily or weekly fleet mileage, but we also like to see route hours broken down into three categories: **morning non-route time**, **afternoon non-route time** and **actual route time**.

Actual route time is either driving the vehicle or servicing the customer. It starts when the driver leaves the facility and ends when they return. Everything before and after is non-route time. This includes any activities such as loading the vehicle, unloading the vehicle, restocking, paperwork, check-in, cash out, etc. The driver's total work hours consists of non-route time plus actual route time.

It's important to establish how much time is available to actually run the route vs. total work hours for the day. Even for commission based routes, drivers can't work an unlimited number of hours each week.

You'll probably see significant discrepancies in non-route time for different drivers. That's an opportunity to make more time available for the route itself. Since time cards don't distinguish between the different types of hours, we use Route Logs (see Additional Resources) to track vehicle mileage and route hours for at least two weeks and analyze the results.

Although GPS is a great way of gathering the information automatically, Route Logs also provide an acceptable benchmark with little effort. Two weeks or longer allows enough time to hit all the weekly and every-other-week (EOW) accounts. It's also a great route management tool for spot-checking route performance throughout the year.

For example, Route Logs might show an average route day of nine hours with ninety minutes spent on loading. In that case, only 7 ½ hours are available for running the route unless non-route time is reduced, perhaps by using an assistant.

These metrics help precisely determine the expected improvement from implementing a particular group of route changes. If the improvement isn't significant, it might not be worth the implementation effort and some minor adjustments would make more sense.

6. Routing Parameters

Before getting started, establish clear goals for the project. You might be interested in reducing overtime, balancing out workload between route days, eliminating trucks or just simply cleaning up route overlap. Territory boundaries, weekly revenue requirements and maximum work hours should always be included in the discussion.

For example, consider the goal of reducing overtime. A certain number of fleet hours are required to service the accounts and cutting back on overtime probably means keeping the same number of vehicles. The first goal limits the second.

Making decisions up front - and writing them down - gets everyone on the same page. Potential problems can be discussed and resolved early in the process before becoming real problems on the street.

7. Multiple Scenarios

MobileIQ typically create several different scenarios for each route balancing project. Most of these are simply "rough drafts" to get a savings estimate with different routing parameters. However, it always includes several pieces of information for the proposed route changes: total accounts changing route and/or route day, fleet mileage, fleet hours and total garments requiring retagging (when applicable) for every scenario.

It's a simple way of eliminating scenarios that probably won't work. For example, you might want to eliminate a route, but realize the total number of accounts being changed is too disruptive. This is much easier to accomplish using route planning software, but some of the basic information can be projected using a spreadsheet.

8. The 7's Trick for Sequencing

Most companies only assign route and day. The drivers are expected to sequence the stops throughout the day and maintain the system. It just doesn't happen reliably. When going through a comprehensive route balancing, take a little extra time and sequence each customer properly along with a driver review.

Regardless of how the stops are sequenced, you don't want to miss any accounts when making changes or they'll be out of the place in the new route architecture. That means extra mileage for the drivers and possibly complaints from the customers.

While the ideal situation is getting everything fixed before the new route(s) start running, sometimes that isn't feasible. You need a backup plan to quickly identify those accounts and assign the correct location, route and stop number.

Industrial laundries often use tags in the garments that have to match the route and day. Another way of "tagging" accounts without changing the route identifiers is sequencing the stops in a particular way. Almost all companies sequence stops throughout the day in one of two methods.

The first method is using multiples of 10

(e.g. Stop numbers are 10, 20, 30, 40, 50...)

The second method is sequential numbering

(e.g. Stop numbers are 1, 2, 3, 4, 5...)

With either approach, you'll also see 0, 1 or 9999 used to identify new accounts that haven't been sequenced yet. Or perhaps ending in 5 or other occasional odd numbers in order to adjust the sequencing throughout the year.



Tip: What you'll **never** see is stop numbers that all end in either 3 or 7. And that's the key to this trick. Use stop numbers like 7, 17, 27, 37, 47, 57... for all the accounts that are part of the route balancing. After the Go Live date, any stop number ending in any other digit wasn't part of the route balancing and needs to be fixed.

A complete article on this technique is available online:

<http://www.gomobileiq.com/tricks-for-implementing-route-changes/>

9. Routing New Accounts

There are two ways of handling new accounts that are added during the route balancing project. Assigning route days based on the current route structure is simpler and convenient for the drivers because it's the same process you're already using. However, those accounts will likely change route and/or route day again after the Go Live date.

The alternative is routing against the new route architecture once it's been finalized and approved. For companies with extra resource, those accounts can even be run by a special delivery vehicle to avoid adding extra mileage to the existing routes.

10. Customer Notification Ideas

It's important to let customers know in advance about potential route day changes. This means the phone will ring less after Go Live, so we typically recommend a two-step process for notifying the customers.

The first is an all-purpose letter saying something like "We'll be making route changes in the near future to improve our fleet efficiency and customer service. If you have any special delivery requirements, please leave a note for the driver or call the Service Department @ (303) 555-1212." You could even include a brief survey or online form.

The second notice is sent to any accounts that actually changed route or day and states the new delivery schedule. These notices can be mailed or dropped off by the drivers while running the regular routes or mailed. If mailing the notices, send them separately from the regular billing statement. They're less likely to be overlooked.

About MobileIQ

Chris Sciora is President & Founder of MobileIQ, Inc. His company has helped hundreds of companies implement route planning solutions over the past 15 years. In addition to the Headlight Route Planner, MobileIQ offers training, workshops and consulting services dedicated to helping small business plan and manage local fleets.

Additional Resources

MobileIQ Route Logs

<http://www.gomobileiq.com/assets/pdf/route-logs.pdf>

Headlight Route Planner Tour

<http://www.gomobileiq.com/tour/>

Headlight Quick Start 101

<http://www.gomobileiq.com/blog/quickstart/>

Visit <http://www.gomobileiq.com/>

Or call Pat Reynolds @ (866) 261-8600 x708

www.gomobileiq.com