**Additional Requirements Document – Handheld Device for Savers’ Drivers**

This assumes use of an external application for mapping, and route optimization. Please advise if you have the capability to capture GPS data from the handheld device for reporting of actual v. planned by route/driver in a near real time environment for access via web

This BRD is for a device level (Android?) application that will exist and reside on the handheld devices assigned to the route drivers

A file containing the following information will in be made available on a daily and as needed (changes made to the file that impact current day operations) basis to the routing and optimization software.

The required fields are:

Unique record ID

Donor name, address, city, state, zip

NPP (name of Non-Profit Partner)

Donation source (email, solicitor, etc)

Any volume or other identifying data about the donation (requires 2 person load, etc)

Pickup date (for verification purposes)

The file returned to the dispatch system from the routing optimization software would contain the unique record ID as well as a route identifier (which shall also indicate and be unique to the origin point) and a stop identifier, as well as eta times by stop. Data to pass through to the device level application could also include stop by stop directions and geo codes, unless that is generated by the application on the handheld. We will need to determine the actual data flow to/from the handheld device. This will be dependent on which application is using the live or near live data to update the route actual v. planned locations throughout the day.

The dispatch system, once in receipt of the file from the optimization software will contain a workspace to assign drivers, helpers, and trucks to each specific route. (This currently exists within our existing application, Good Donor, but should be part of the overall solution application). This application will need to house editable data of those fields. We would need to determine what ancillary data should be housed for these fields as well. For example for the drivers, does the system have the ability to house the date of their DOT physical or their address and contact info, etc?

Once the routes have resources attached to them, they are available for call from or push to the handheld device. The driver using his unique sign on will log into the device resident application and will request his route assignment for the day, or select it from what has been pushed to the unit. All of the data for the day, including directions will flow to and reside on the device. The device records the driver and if any, the helper (who will also sign on to the handheld device using a unique sign on) start times. The driver will verify the truck number and select the pre-trip inspection form (DVIR) resident in the device. Some of the fields will require user verification that the problem identified has been fixed or that he will have to be reassigned to another truck if it cannot. We will need the ability to reassign resources as needed. We will need to have a warning with an override if any resources are assigned twice in a single day. (at this point, if a driver is assigned to two routes for instance in the case of being short a driver, we may need a process to re-route those stops to ensure feasibility)

Once the driver has completed and submitted a clean DVIR, he will begin his trip. The pickups will reside in the device in the order to be picked up. The driver may select the stops out of order; we will need to determine the impact on actual v. planned reporting and how the device will sync to the database. The driver receives directions to and address of his first stop. Stops also appear in a list view if he wishes to select an alternate stop, but default is to produce the stops in order as routed. Driver arrives at first stop, application allows driver to arrive and “OK” the stop if donation is present or arrive and no donation if donation is not present. If donation is not present, driver is able to select a reason for there being no donation. This list should be centrally editable by an administrator. Any time certain reason codes are selected an auto generated message goes to a customer service mailbox for handling. This email includes all donor information in addition to the stop information selected / entered by the driver.

If the stop where the donation is not available becomes available, the dispatcher should be able to access screens showing the current driver locations as well as driver locations planned for the next day. The dispatcher will then decide if it is feasible to reschedule the stop into the current day or into a future day based on the proximity of current and future routes (future locations would likely require an enhancement to GD to allow a map based display of stops scheduled up to that point). The dispatcher must have a method of sending the now additional stop to the handheld device to be integrated into the routing (will this require a pass through the routing software?).

If a donated item(s) is left behind and so indicated by a selection made by the driver, the camera application should auto-launch and require a picture of the stranded donation. This picture should then be attached to the specific stop and be retrievable in GD. All stop level data should stream to the database for upload into Good Donor (our back office system) as each is complete. Whenever the device is out of range for an internet connection, the data should be stored on the device and sent at the next available time. GPS ping should be set for every x minutes, which needs to be configurable. Before the driver proceeds to the next stop, he should have the ability to estimate the amount of the donation (possibly should have a default amount based on the donation source and the driver edits if necessary) and identify any special items (desk, couch, etc) either through selection or data entry or a combination of both.

When the driver reaches the store, a store employee should have a unique ID that allows them to populate a delivery and truck check form (form to be supplied to vendor). Store employee signature is captured. As with stops, this action of completing the store delivery is time stamped. The driver returns to the domicile location, completes the DVIR for the post trip inspection and then signs out of the application, completing his day (helper if one, signs out first).

Additional notes

Changes (Add-on’s reschedules, etc) additions/ deletions to route will generate an alert to the driver whose route it was changed on.

Ability to assign cost (likely a per mile or a per mile and per stop) so that we can determine trucking cost as a percentage of the value (or weight) of the goods picked up