TRackSchoolBuS

Implementation plan

We have an implementation process that is carefully crafted and improvised using our learning from previous on-field experiences. This implementation process includes five clear cut steps as follows:

1. **The Hands-on approach** (Manual data entry)

This is the most familiar and tedious of data adding methods. The support staff at SLCSD will have to enter all the necessary data such as details of school, student, vehicle, driver, student's bus stop, route, trip etc. by typing manually.

2. **Old Data, New Software approach** (Integration with school's existing software)

If there is existing data which is accurate and error-free, this approach would be very helpful. It can ease the transition from old software to the new one. Only caveat is that if the data is not really accurate, it can be messy.

How it works

- We will **order hardware** and RFID cards.
- Our technical team will have **discussion with Transfinder team** and will proceed with integration. (Integrated system will be ready by the time devices reach SLCSD)
- Our tracking system will **fetch routing data from Transfinder** Route finder Pro solution.
- SLCSD's mechanics would be **trained to configure and install devices** to vehicles.
- SLCSD's **authorized employees gets trained** to use tracking system.
- We have "Tag vendor module" for **RFID card printing and distribution.** Tag vendor can access the system to fetch student details for card printing and distribution.
- The **transport manager needs to approve** schedules created by the system.
- We will have a **trial session** to check out the system.
- Go **live from 06/01/2020**

3. **Advanced and Hassle-Free** (Auto data collection method)

This is the most advanced method of collecting data. Ideal choice if there is no existing data. It is a simple process where the system collects student data on the run. It will require a week's time to get going 100%, but is a hassle-free approach especially if you have large fleet.

- We will **order hardware** and RFID cards.
- **Training will be provided to SLCSD employees** on importing master data (school profiles, students & parents' data, vehicles, drivers, academic details etc) and to set master settings for the system.
- Once the hardware has arrived, **mechanics would be trained to configure and install** devices to the vehicles.
- We have "Tag vendor module" for **RFID card printing and distribution**. Tag vendor can access the system to fetch student details for card printing and distribution.
- The drivers run the bus as per usual trip and collect students from their bus stops. The **students need to tap their card to RFID reader** installed in the bus while entering and before exiting from the bus.
- The **system collects details and schedules** the trip.
- The **transport manager needs to approve** schedules created by the system.
- The approved **trip manifest is available for drivers** through Driver's App.

4. **Artificial Intelligence Smartness!** (Route Planner Method)

This is a fairly simple method, where the data is available in a commonly used format (excel, csv). The available data needs to be uploaded. Our smart A.I then kicks in and analyzes the data, to create the best optimized routes possible.

Transport Manager can then look at the route, make changes if necessary and approve. This can help find the best routes from an ROI perspective as well.

- We will **order hardware** and RFID cards.
- SLCSD will **import school details, student details** along with address, and vehicle details along with seat capacity etc to “Route Planner ”module.
- The **route planner will analyze** the imported data and **create the best optimized routes and trips** as possible using our AI algorithms.
- **Transport manager will review trips and routes** suggested by Route planner module and change if any optimizations needed.
- Finally, **transport manager will approve** the system generated routes and trips.
- We have **“Tag vendor module” for RFID card printing and distribution**. Tag vendor can access the system to fetch student details for card printing and distribution.
- We will have a **trial session** to check out the system.
- Go **live from 06/01/2020.**

5. Real-time Manual Approach (Live trip route creation method)

An approach which is similar to Auto data collection, but here, instead of the system collecting data, supporting staff physically goes on to trips and collects data.

How it works

- The supporting staffs of SLCSD will take real trips to add and assign students to their corresponding bus stops.
- Finally, it monitors system to generate the route, trips and student bus stops etc accordingly from the data provided by the supporting team.