User’s Manual – Moving Block Overlay (MBO)

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On Track Trainwreck

**Introduction:**

The Moving Block Overlay User Interface displays the safe Moving Block speed and authority for each train, passenger movement, and the transit operator schedule. The user will be able to choose the mode of operation between Moving Block and Fixed Block.

**Overview:**

The MBO GUI contains two buttons that allow you to switch the mode of operation between MBO and Fixed Block. The button of the current mode of the system will be green in color, while the other button will be gray. The table on the MBO GUI displays information each train’s id and location, the calculated safe MBO speed and authority, as well as the Fixed Block speed and authority, and the variance between each. Additionally, the GUI contains two buttons that allow the user to view the Scheduler and the Passenger Log.

**Variables/Actions:**

MBO button – When the MBO button is pressed, the transit system will operate in Moving Block mode. The MBO button will change from gray to green to indicate that it is active. The safe Train speed and authority that the MBO module calculates and transmits to the CTC and Train Controller will be the MBO value.

Fixed Block button – When the Fixed Block button is pressed, the transit system will operate in Fixed Block mode. The Fixed Block button will change from gray to green to indicate that it is active. The safe Train speed and authority that the MBO module calculates and transmits to the CTC and Train Controller will be the Fixed Block value.

View Scheduler - When the View Scheduler button is pressed, a window will open displaying a table of the Transit Operator Schedule. It will contain the following information for each conductor: the train id, train’s location, and start and end time for each of their shifts.

View Passenger Log – When the View Passenger Log button is pressed, a window will open displaying a table that tracks passenger movement. It will contain the train’s id and passenger count after visiting each of the stops on its route.