

CASE STUDY

BUS PRIORITY MANAGEMENT SYSTEM

Bus Priority Management System (BPMS) - Accomplishes the requirement of very reliable and precise bus arrival detection at the specific location on the platform with accuracy. The solution might also be used for road tracking and identification at the selected checkpoints or the green-line traffic control for vehicle priority.

Objectives

Reliable and precise bus arrival detection, Accurate information about the location, Detecting the proper stopping position of a vehicle, Proper safety locks are enabled to allow the platform screen door to open, Road Tracking or green line traffic control for vehicle priority.

Solution

Intellistride proposed the use of RFID readers and diffusive sensors to detect bus arrival and notify drivers to reach the parking area, detect stopping position and update the system.

Intellistride deployed following sensors hardware and software components to implement.

Hardware Components

RFID Reader
Diffusive proximity sensor
IoT Server
Workstation

Challenges

Large number of buses in a city environment.

Precision tracking at bus stops
Accurate bus arrival information
Sensor based tracking and operations.



Results

Precise and reliable bus arrival detection.

Proper detection of stopping position.

Allows platform screen door open upon arrival with safety locks.

Road Tracking and vehicle identification.