PUBFIX: Public Transport Fleet Dispatch Scheduling and Management System

The Problem
Public transport in urban cities are being affected by serious problems in traffic congestion, overcrowding of vehicles, and long passenger queues. One area of the intelligent transportation system (ITS) is the development of a more efficient bus dispatch scheduling system. Bus dispatch scheduling in the EDSA route of Metro Manila runs on a decentralized fixed scheduling system. Scheduling must take into consideration the passenger demand and bus fleet operation capacity.

Who has the Problem?
1. Public transport operators (buses, taxis, vans, jeeps, and jeepneys, roro boat services, etc.)
2. Public transport drivers
3. Point-to-point (P2P) bus operations
4. Truck operators
5. Regulatory agencies for traffic and transport management (DOTr, LTO, LTFRB)

The Solution
The PUBFIX innovation aims to address traffic congestion due to long queuing of public transports to pick up passengers. An adaptive bus scheduling and dispatch system was developed to optimize logistical resources while maximizing the profit. The system can be integrated to existing systems, e.g., installation of low-cost on-board units to transmit passenger demand to a central location. Dwell time for each bus in each bus stop areas can also be calculated to avoid long queuing. A system in bus stop areas (or public) can also be employed to advise public transport drivers of possible passenger demand and even traffic congestion. Public transport operators can benefit by having a system that can monitor the movements of their bus (or taxi, vans, RORO boats, and even trucks) fleet in real-time for evaluation of dispatch schemes and planning of logistical resources management.

What we Need
- Early adopters
- Hardware vendors
- Partners
- Investors

Market Strategy
The services can be offered to LGUs and other government agencies for traffic management. The services can also be offered to bus fleet operators by analyzing their fuel consumption and possible cost savings by optimizing their bus fleet operations, and to bus advertisers, by giving them real-time passenger footprints.

Image Detection Technology

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