

Review of: "Intelligent Transportation System Real-Time Tracking"

Hassan Habibi Gharakheili¹

1 University of New South Wales

Potential competing interests: No potential competing interests to declare

This paper aims to improve the certainty of and minimize waiting times in bus transportation systems. The authors propose a tracking system empowered by GPS data and mobile apps to enhance the passenger experience.

The paper does successfully articulate aspects of the intended problem. It suffers from a lack of scientific discussions. It reads more like an engineering technical report.

This system developed by the authors may address "uncertainty". However, knowing the position of buses does not impact the waiting time. Waiting times are a function of bus arrivals, available seats, and queue length.

The authors do not explicitly state the various interactions a passenger may make with the mobile app. It remains unclear how those interactions can help solve a concrete transportation planning problem.

In addition to providing passengers with real-time data on bus locations, transportation authorities may need to obtain real-time queue length data. That way, they may wish to dispatch more buses during peak hours (or certain events) to manage queue length and waiting times.

It is unclear how the authors you quantify the overall passenger experience. It may help if the authors could analyze data during several months collected from their platform while real passengers participate and contribute data

The authors do not justify their choice of platform (ThingSpeak). Readers wonder if there are other alternatives. What are the Pros and Cons of ThingSpeak?

The location data is sent to the cloud server via the public mobile network. The authors do not state on the frequency of data transmission. What if certain data points are missed due to the lack of mobile coverage?

What are "any additional relevant details" that can be extracted from the incoming data on the cloud server?

What is a "Flutter-based mobile application"? Why is this application type used? Any specific Pros and/or Cons?

The location data is transmitted in plaintext via HTTP. Readers wonder we should use a more secure protocol of transmit bus data over the Internet?

Qeios ID: 6G6HAU · https://doi.org/10.32388/6G6HAU

