ENHANCED TRANSIT LOCATION SYSTEMS AND METHODS

CROSS REFERENCE TO RELATED APPLICATIONS

(01) The present application claims priority to U.S. Provisional Patent Application No. 62/897,860, filed September 9, 2019, entitled “ENHANCED TRANSIT LOCATION SYSTEMS AND METHODS,” the disclosure thereof incorporated by reference herein in its entirety.

FIELD

(02) The present disclosure relates generally to transportation intelligence, and more specifically to systems and methods for enhanced identification of transit location.

SUMMARY

(02a) According to a first aspect of the present invention, there is provided a system, comprising: a hardware processor; and a non-transitory machine-readable storage medium encoded with instructions executable by the hardware processor to perform a method comprising: receiving, into a vehicle radio located on a vehicle traveling along a roadway, signals transmitted by wayside radios located along the roadway; and determining a location of the vehicle along the roadway based on the received signals.

(02b) According to a second aspect of the present invention, there is provided a non-transitory machine-readable storage medium encoded with instructions executable by a hardware processor of a computing component, the machine-readable storage medium comprising instructions to

cause the hardware processor to perform a method comprising: receiving, into a vehicle radio located on a vehicle traveling along a roadway, signals transmitted by wayside radios located along the roadway; and determining a location of the vehicle along the roadway based on the received signals.

(02c) According to a third aspect of the present invention, there is provided a method comprising: receiving, into a vehicle radio located on a vehicle traveling along a roadway, signals transmitted by wayside radios located along the roadway; and determining a location of the vehicle along the roadway based on the received signals.

(03) Embodiments of the present disclosure provide systems and methods for tracking information relating to transportation vehicles. For example, some embodiments of the disclosure provide a system for enhanced location and data collection from vehicles traveling along a vehicle pathway. The system may include a communications mesh architecture of vehicle tags and anchors affixed to segments of a vehicle pathway. For example, the vehicle may be a light rail train, a commuter train, a freight train, an automobile, an airplane, a ship, a space vehicle, a ski lift, a gondola, or other forms of transportation as known in the art. The transportation pathway may be any pathway along which the respective vehicle moves, such as a train track, a road, a canal or shipping lane, a runway, an airway, or other vehicle pathways as known in the art. By providing a communications mesh architecture, the