

Claims

1. A method for managing a public transport system, the method comprising:
 - receiving, by a receiver module, information indicating a change of status for a component of the public transport system;
 - identifying, by a locator module, a commuter who is affected by the change of status;
 - generating, by an alternative travel advisory module, an alternative travel advisory for the commuter based on the change of status; and
 - transmitting, by a transmitter module, the alternative travel advisory to the commuter.
2. The method of claim 1, wherein:
 - the change of status includes a delay in an expected time of arrival of a public transport vehicle;
 - identifying the commuter includes locating the commuter in the vehicle; and
 - the alternative travel advisory includes a message advising the commuter to leave the vehicle.
3. The method of claim 2 further comprising receiving from the commuter information indicating that the commuter has boarded the vehicle, wherein locating the commuter in the vehicle is based on the information.
4. The method of claim 2, further comprising:
 - tracking a location of the commuter; and
 - tracking a location of the vehicle,wherein locating the commuter in the vehicle is based on comparing the location of the commuter with the location of the vehicle.
5. The method of claim 1, wherein:
 - the commuter is located in a first public transport vehicle, and
 - the alternative travel advisory includes advising the commuter to leave the first public transport vehicle and board a second public transport vehicle.
6. The method of claim 1, wherein:

the change of status comprises a delay in an expected time of arrival of a first public transport vehicle boarded by the commuter, and
notification of the change of status is received from at least one of an operator of the first vehicle or an operator of a second public transport vehicle different from the first vehicle.

7. The method of claim 1, wherein generating the alternative travel advisory is based on at least one of an expected time of arrival for the commuter or a preference of the commuter.

8. The method of claim 1, wherein:

the change of status includes a traffic disruption, and
identifying the commuter includes determining that the commuter has boarded a public transport vehicle for which a schedule is affected by the traffic disruption.

9. The method of claim 1, wherein generating the alternative travel advisory comprises using a look-up table for a plurality of public transport vehicles.

10. The method of claim 9, wherein:

the change of status includes a traffic disruption; and
generating the alternative travel advisory comprises identifying an alternative public transport vehicle of the plurality of public transport vehicles, for which a schedule is not affected by the traffic disruption.

11. The method of claim 10, wherein identifying the alternative public transport vehicle comprises determining that the alternative public transport vehicle has a stop located within a pre-determined distance from a location of the commuter.

12. The method of claim 11, wherein identifying the alternative public transport vehicle further comprises determining that the alternative public transport vehicle has a second stop within a second pre-determined distance from a destination of the commuter.

13. The method of claim 1, wherein transmitting the alternative travel advisory comprises transmitting the advisory to a mobile device.

14. The method of claim 1, wherein the alternative travel advisory comprises a message identifying a preferred option for reaching a destination of the commuter and a second option for reaching the destination.
15. The method of claim 1, wherein the alternative travel advisory comprises an identification a travel route that originates as a present location of the commuter and ends at a destination of the commuter.
16. The method of claim 1, wherein the alternative travel advisory comprises a message directing the commuter to walk to a public transport stop and board a public transport vehicle at the public transport stop.
17. The method of claim 1, wherein the alternative travel advisory includes an advertisement.
18. The method of claim 17, wherein the advertisement is based in part on one or more of a location of the commuter, a time of the transmitting the alternative travel advisory, a context of the commuter's commute, and a preference of the commuter.
19. The method of claim 1 further comprising transmitting the alternative travel advisory to a driver module or to a central module.
20. The method of claim 1, wherein the change of status includes a change in a number of available seats in a public transport vehicle.
21. The method of claim 20, wherein the change in the number of available seats is received from an operator of the vehicle.
22. An apparatus for guiding a public transport system, the apparatus comprising a public transport central module which comprises:
- a receiver module configured to receive information indicating a change of status of a component of the public transport system;
 - a locator module configured to identify a commuter who is affected by the change of status;
 - an alternative travel advisory module configured to generate an alternative travel advisory for the commuter based on the change of status; and

a transmitter module configured to transmit the alternative travel advisory to the commuter.

23. A non-transitory computer-readable medium storing instructions which, when executed by one or more processors, cause the one or more processors to perform a method for guiding a public transport system, the method comprising:

receiving, via a receiver module, information indicating a change of status of a component of a public transport system;
identifying, by a locator module, a commuter who is affected by the change of status;
generating, by an alternative travel advisory module, an alternative travel advisory for the commuter based on the change of status; and
transmitting, by a transmitter module, the alternative travel advisory to the commuter.

24. An apparatus configured to be accessed by a driver of a public transport vehicle and to enable the driver to interact with a public transport system, the apparatus comprising a driver module which comprises:

an input/output module configured to transmit information to the public transport system; and
a dashboard module configured to receive a driver-input from the driver and transmit the driver-input to the input/output module or configured to receive a driver-information from the input/output module and display the driver-information to the driver.

25. The apparatus of claim 24, wherein the dashboard module is configured to receive the driver-input from the driver and wherein the apparatus further comprises an alert sender module for receiving the driver-input, generating an alert based on the driver-input, and sending the alert, through the input/output module, to the public transport system, wherein the alert indicates a change of status for a component of the public transport system.

26. The apparatus of claim 25, wherein the change of status includes a change in a number of available seats in the vehicle.

27. The apparatus of claim 26, wherein the vehicle is a first vehicle, wherein the change in the number of available seats indicates that the first vehicle is overcrowded, and wherein the

alert causes the public transport system to allocate a second vehicle to a transport route of the first vehicle.

28. The apparatus of claim 26, wherein the vehicle is a first vehicle, wherein the change in the number of available seats indicates that the first vehicle is underused, and wherein the alert causes the public transport system to de-allocate a second vehicle from a transport route of the first vehicle.

29. The apparatus of claim 25, wherein the change of status includes a delay in an expected time of arrival of the vehicle.

30. The apparatus of claim 25, wherein the change of status includes a traffic disruption.

31. The apparatus of claim 25, wherein the alert is sent to a central module or to a commuter module.

32. The apparatus of claim 24, wherein the dashboard module is configured to receive the driver-information from the input/output module and display the driver-information to the driver, wherein the driver-information includes one or more of information about a number of commuters awaiting in an upcoming stop and information about a number of seats available in a preceding vehicle.

33. An apparatus configured to enable a commuter to interact with a public transport system, the apparatus comprising a commuter module which comprises:

- an input/output module configured to transmit information to the public transport system; and

- a dashboard module configured to receive, through the input/output module, a message from the public transport system and further configured display the message to the commuter, wherein the message includes information about a status of the public transport system.

34. The apparatus of claim 33, wherein the message includes an alternative travel advisory for the commuter.

35. The apparatus of claim 34, wherein the alternative travel advisory is in response to a change of status for a component of the public transport system, and wherein the change of status affects the commuter.
36. The apparatus of claim 33, wherein the message includes a section of a map of the public transport system or a schedule of the public transport system.
37. The apparatus of claim 33, wherein the message includes an indication of a number of available seats in a public transport vehicle.
38. The apparatus of claim 33, wherein the message includes an advertisement.
39. A method for managing a public transport system, the method comprising:
 receiving, by a receiver module, information indicating locations of a plurality of commuters;
 determining, by a locator module, that the plurality of commuters are located at a one location; and
 determining a number of commuters located at the one location.
40. The method of claim 39, wherein the one location is inside a public transport vehicle and wherein the determining includes determining a number commuters boarding the vehicle.
41. The method of claim 39, wherein the one location is a location of a public transport stop and wherein the determining includes determining a number of commuters awaiting at the stop.
42. The method of claim 39, wherein the one location is a location of a public transport stop and wherein the determining includes determining a number of commuters awaiting at the stop for boarding a public transport vehicle along a specific public transport route.
43. The method of claim 39, further comprising transmitting the number to a driver module configured to be used by a driver of a public transport vehicle.

Claims

1. A method for managing a public transport system, the method comprising:
receiving, by a receiver module implemented at least partially in hardware, information indicating a change of status for a component of the public transport system;
identifying, by a locator module implemented at least partially in hardware, a commuter who is affected by the change of status;
generating, by an alternative travel advisory module implemented at least partially in hardware, an alternative travel advisory for the commuter based on the change of status; and
transmitting, by a transmitter module implemented at least partially in hardware, the alternative travel advisory to the commuter.

2. The method of claim 1, wherein:
the change of status includes a delay in an expected time of arrival of a public transport vehicle;
identifying the commuter includes locating the commuter in the public transport vehicle;
and
the alternative travel advisory includes a message advising the commuter to leave the public transport vehicle.

3. The method of claim 2, further comprising:
receiving, from the commuter, information indicating that the commuter has boarded the public transport vehicle,
wherein locating the commuter in the public transport vehicle is based on the information indicating that the commuter has boarded the public transport vehicle.

4. The method of claim 2, further comprising:
tracking a location of the commuter; and
tracking a location of the public transport vehicle,
wherein locating the commuter in the public transport vehicle is based on
comparing the location of the commuter with the location of the public transport vehicle.
5. The method of claim 1, wherein:
the commuter is located in a first public transport vehicle, and
the alternative travel advisory includes advising the commuter to leave the first public
transport vehicle and board a second public transport vehicle.
6. The method of claim 1, wherein:
the change of status comprises a delay in an expected time of arrival of a first public
transport vehicle boarded by the commuter,
the information indicating the change of status is received from at least one of an
operator of the first public transport vehicle or an operator of a second public transport vehicle,
and
the second public transport vehicle is different from the first public transport vehicle.
7. The method of claim 1, wherein generating the alternative travel advisory
comprises:

generating the alternative travel advisory for the commuter based on the change of status and based on at least one of an expected time of arrival for the commuter or a preference of the commuter.

8. The method of claim 1, wherein:
the change of status includes a traffic disruption, and
identifying the commuter includes determining that the commuter has boarded a public transport vehicle for which a schedule is affected by the traffic disruption.

9. The method of claim 1, wherein generating the alternative travel advisory comprises using a look-up table for a plurality of public transport vehicles.

10. The method of claim 9, wherein:
the change of status includes a traffic disruption; and
generating the alternative travel advisory comprises identifying an alternative public transport vehicle, of the plurality of public transport vehicles, for which a schedule is not affected by the traffic disruption.

11. The method of claim 10, wherein identifying the alternative public transport vehicle comprises determining that the alternative public transport vehicle has a stop located within a pre-determined distance from a location of the commuter.

12. The method of claim 11, wherein identifying the alternative public transport vehicle further comprises determining that the alternative public transport vehicle has a second stop within a second pre-determined distance from a destination of the commuter.

13. The method of claim 1, wherein transmitting the alternative travel advisory comprises transmitting the alternative travel advisory to a mobile device.

14. The method of claim 1, wherein the alternative travel advisory comprises a message identifying a preferred option for reaching a destination of the commuter and a second option for reaching the destination.

15. The method of claim 1, wherein the alternative travel advisory comprises an identification of a travel route that originates at a present location of the commuter and ends at a destination of the commuter.

16. The method of claim 1, wherein the alternative travel advisory comprises a message directing the commuter to walk to a public transport stop and board a public transport vehicle at the public transport stop.

17. The method of claim 1, wherein the alternative travel advisory includes an advertisement.

18. The method of claim 17, wherein the advertisement is based in part on one or more of a location of the commuter, a time of the transmitting the alternative travel advisory, a context of a commute of the commuter, or a preference of the commuter.

19. The method of claim 1, further comprising:
transmitting the alternative travel advisory to a driver module or to a central module.

20. The method of claim 1, wherein the change of status includes a change in a number of available seats in a public transport vehicle.

21. The method of claim 20, wherein receiving information indicating the change of status comprises:

receiving information indicating the change in the number of available seats from an operator of the public transport vehicle.

22. A system including:

an apparatus to:

receive information indicating a change of status of a component of a public transport system;

identify a commuter who is affected by the change of status;

generate an alternative travel advisory for the commuter based on the change of status; and

transmit the alternative travel advisory to the commuter.

23. A non-transitory computer-readable medium storing instructions, the instructions comprising:

one or more instructions which, when executed by one or more processors, cause the one or more processors to:

receive information indicating a change of status of a component of a public transport system;

identify a commuter who is affected by the change of status;

generate an alternative travel advisory for the commuter based on the change of status;

and

transmit the alternative travel advisory to the commuter.

24. An apparatus comprising:

one or more processors to:

receive a driver-input from a driver of a vehicle of a public transport system;

determine a change of status for a component of the public transport system based on the driver-input;

generate an alert based on the change of status; and

transmit the alert to to a module of the public transport system.

25. The apparatus of claim 24, wherein the change of status includes a change in a number of available seats in the public transport vehicle of the public transport system.

26. The apparatus of claim 25,
wherein the vehicle is a first vehicle,

wherein the change in the number of available seats indicates that the first vehicle is overcrowded, and

wherein the alert causes the public transport system to allocate a second vehicle to a transport route of the first vehicle.

27. The apparatus of claim 25,
wherein the vehicle is a first vehicle,
wherein the change in the number of available seats indicates that the first vehicle is underused, and

wherein the alert causes the public transport system to de-allocate a second vehicle from a transport route of the first vehicle.

28. The apparatus of claim 24, wherein the change of status includes a delay in an expected time of arrival of the vehicle.

29. The apparatus of claim 24, wherein the change of status includes a traffic disruption.

30. The apparatus of claim 24, wherein the module is a central module or a commuter module.

31. The apparatus of claim 24,
wherein the one or more processors are further to:
receive driver-information, and

provide, for display, the driver-information to the driver, and
wherein the driver-information includes one or more of:

information about a number of commuters waiting at an upcoming stop, or
information about a number of seats available in a preceding vehicle.

32. An apparatus comprising:

one or more processors to:

transmit commuter information, to a public transport system, that indicates
that a commuter boarded a public transport vehicle of a public transport system;

receive, based on transmitting the commuter information, a message from
the public transport system;

determine, based on the message, information about a status of the public
transport system; and

provide, for display, the information about the status of the public
transport system.

33. The apparatus of claim 32, wherein the message includes an alternative travel
advisory for the commuter.

34. The apparatus of claim 33,
wherein the alternative travel advisory is in response to a change of status for a
component of the public transport system, and
wherein the change of status affects the commuter.

35. The apparatus of claim 32, wherein the message includes a section of a map of the public transport system or a schedule of the public transport system.

36. The apparatus of claim 32, wherein the message includes an indication of a number of available seats in a public transport vehicle.

37. The apparatus of claim 32, wherein the message includes an advertisement.

38. A method for managing a public transport system, the method comprising:
receiving, by a receiver module of at least one device, information indicating locations of a plurality of commuters;

determining, by a locator module of the at least one device, a quantity of particular commuters, of the plurality of commuters, that are located at one location of the locations; and

providing, by the at least one device and to a driver module, information based on the quantity of the particular commuters.

39. The method of claim 38,
wherein the one location is inside a public transport vehicle, and
wherein determining the quantity of the particular commuters includes:

determining the quantity of the particular commuters who boarded the public transport vehicle.

40. The method of claim 38,
wherein the one location is a location of a public transport stop, and

wherein determining the quantity of the particular commuters includes:

determining the quantity of the particular commuters at the stop.

41. The method of claim 38,

wherein the one location is a location of a public transport stop, and

wherein determining the quantity of the particular commuters includes:

determining the quantity of the particular commuters waiting at the stop to board a public transport vehicle along a specific public transport route.

42. The method of claim 38, wherein the driver module is configured to be used by a driver of a public transport vehicle.

43. The system of claim 22, where the alternative travel advisory includes advice for the commuter to leave a first public transport vehicle and board a second public transport vehicle.