Claims

What is claimed is:

1. A method of managing a shuttle service, the method being implemented by one or more processors, the method comprising:

operating one or more non-shuttle service request identifiers to search a database of historic transport-related requests to identify a plurality of historic non-shuttle service requests, each historic non-shuttle service request including a start time and a route defined by at least an origin location and a destination location, wherein the one or more processors are configured to be in communication with the database;

operating one or more non-shuttle service request selectors to select a plurality of historic non-shuttle service requests from the database, one or more of the selected historic non-shuttle service requests having at least a portion of its route in common with one or more other selected historic non-shuttle service requests, wherein at least one of the selected historic non-shuttle service requests includes a historic non-shuttle service request that was sent from a user computing device and received but not allocated or matched to an available non-shuttle service provider; and

operating one or more candidate service route generators to derive a candidate shuttle service route for use in providing a shuttle service, the candidate shuttle service route derived based on one or more of the selected historic non-shuttle service requests that were sent from a user computing device and received but not allocated or matched to an available non-shuttle service provider.

2. The method of claim 1, wherein

the candidate shuttle service route is derived based on at least the start time, route, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

3. The method of claim 1, wherein the one or more historic non-shuttle service requests is selected based on those historic non-shuttle service requests having:

start times within a first threshold time period;

origin locations located within a first threshold area; and/or

destination locations located within a second threshold area.

4. The method of claim 1, wherein operating the one or more candidate service route generators further comprises deriving a start time for the candidate shuttle service route, an origin

location for the candidate shuttle service route, and a destination location for the candidate shuttle service route;

wherein the start time for the candidate shuttle service route, the origin location for the candidate shuttle service route, and the destination location for the candidate shuttle service route are derived based on the start time, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

5. The method of claim 4, wherein operating the one or more candidate service route generators further comprises deriving one or more drop off and/or one or more pickup locations between the origin location for the candidate shuttle service route and destination location for the candidate shuttle service route;

wherein the one or more drop off and/or one or more pickup locations are derived based on the start time, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

6. The method of claim 1, wherein one or more of the following apply:

one or more of the selected historic non-shuttle service requests include requests for taxi service, private car service, and/or ride share service; and/or

each historic non-shuttle service request is a transport-related request that is not a request for shuttle service.

7. The method of claim 1, further comprising

operating one or more potential user selectors to:

perform an analysis to identify one or more users who are price-sensitive; and

select one or more potential users for the shuttle service;

wherein at least one of the selected potential users is a user identified as being price-sensitive;

wherein the selecting of the one or more historic non-shuttle service requests includes selecting one or more historic non-shuttle service requests previously sent by user computing devices of one or more of the selected potential users.

8. The method of claim 7, wherein the one or more historic non-shuttle service requests previously sent is by the user identified as being price-sensitive.

9. The method of claim 1, wherein

the database of historic transport-related requests further includes a plurality of historic shuttle service requests sent from user computing devices of a plurality of users; and

wherein the deriving of the candidate shuttle service route is further based on one or more of the historic shuttle service requests.

10. The method of claim 1, wherein operating the one or more candidate service route generators further comprises:

refining the candidate service route so as to minimize a quantity of pickups and/or drop offs along the candidate service route.

11. The method of claim 10, wherein the refining of the candidate service route includes adjusting the start time for the candidate shuttle service route, adjusting the origin location for the candidate shuttle service route, and/or the adjusting destination location for the candidate shuttle service route.

12. The method of claim 1, further comprising operating one or more potential user selectors to select one or more potential users for the shuttle service; and

operating one or more user-side notification and booking controllers to communicate to user computing devices of one or more of the selected potential users, the communicating including providing information pertaining to the candidate shuttle service route and/or an opportunity to receive shuttle service on the candidate shuttle service route.

13. The method of claim 1, further comprising performing a service provider matching process to match a service provider with the candidate shuttle service route.

14. The method of claim 13, wherein the service provider matching process is based on one or more of the following:

minimizing a travel distance and/or travel time by the matched service provider between servicing a prior candidate shuttle service route and servicing the candidate service route; and/or

minimizing a travel distance and/or travel time by the matched service provider between servicing the candidate service route and a next candidate shuttle service route.

15. A method of managing a shuttle service, the method being implemented by one or more processors, the method comprising:

operating one or more non-shuttle service request identifiers to search a database of historic transport-related requests to identify a plurality of historic non-shuttle service requests, each historic non-shuttle service request including a start time and a route defined by at least an origin location

and a destination location, wherein the one or more processors are configured to be in communication with the database;

operating one or more non-shuttle service request selectors to select one or more of the historic non-shuttle service requests from the database;

operating one or more candidate service provider selectors to select one or more candidate service providers available to service one or more of the selected historic non-shuttle service requests;

operating one or more candidate service route generators to derive one or more candidate shuttle service routes, the one or more candidate shuttle service routes derived based on one or more of the selected historic non-shuttle service requests; and

operating one or more candidate shuttle service route selectors to select one or more of the candidate shuttle service routes for use in providing a shuttle service, the selected one or more candidate shuttle service routes selected based on one or more of the selected candidate service providers.

16. The method of claim 15, wherein each selected historic non-shuttle service request includes at least a portion of its route in common with one or more other selected historic non-shuttle service requests.

17. The method of claim 15, wherein

the candidate shuttle service route is derived based on at least the start time, route, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

18. The method of claim 15, wherein the one or more historic non-shuttle service requests is selected based on those historic non-shuttle service requests having:

start times within a first threshold time period;

origin locations located within a first threshold area; and/or

destination locations located within a second threshold area.

19. The method of claim 15, wherein operating the one or more candidate service route generators further comprises deriving a start time for the candidate shuttle service route, an origin location for the candidate shuttle service route, and a destination location for the candidate shuttle service route;

wherein the start time for the candidate shuttle service route, the origin location for the candidate shuttle service route, and the destination location for the candidate shuttle service route are derived based on the start time, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

20. The method of claim 19, wherein operating the one or more candidate service route generators further comprises deriving one or more drop off and/or one or more pickup locations between the origin location for the candidate shuttle service route and destination location for the candidate shuttle service route;

wherein the one or more drop off and/or one or more pickup locations are derived based on the start time, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

21. The method of claim 15, wherein one or more of the following apply:

the selecting of the historic non-shuttle service requests includes selecting historic non-shuttle service requests that were not allocated, not matched, and/or cancelled;

one or more of the selected historic non-shuttle service requests include requests for taxi service, private car service, and/or ride share service; and/or

each historic non-shuttle service request is a transport-related request that is not a request for shuttle service.

22. The method of claim 15, further comprising operating one or more potential user selectors to:

perform an analysis to identify one or more users who are price-sensitive; and

select one or more potential users for the shuttle service;

wherein at least one of the selected potential users is a user identified as being price-sensitive;

wherein the selecting of the one or more historic non-shuttle service requests includes selecting one or more historic non-shuttle service requests previously sent by user computing devices of one or more of the selected potential users.

23. The method of claim 15, wherein

the database of historic transport-related requests further includes a plurality of historic shuttle service requests; and

the deriving of the candidate shuttle service route is further based on one or more of the historic shuttle service requests.

24. The method of claim 15, further comprising operating the one or more candidate service route generators to

refine the candidate service route so as to minimize a quantity of pickups and/or drop offs along the candidate service route.

25. The method of claim 24, wherein the refining of the candidate service route includes adjusting the start time for the candidate shuttle service route, adjusting the origin location for the candidate shuttle service route, and/or adjusting the destination location for the candidate shuttle service route.

26. The method of claim 15, further comprising operating one or more potential user selectors to select one or more potential users for the shuttle service; and

operating one or more user-side notification and booking controllers to communicate to user computing devices of one or more of the selected potential users, the communicating including providing information pertaining to the candidate shuttle service route and/or an opportunity to receive shuttle service on the candidate shuttle service route.

27. The method of claim 15, wherein the candidate service providers are selected based on one or more of the following:

minimizing a travel distance and/or travel time by the candidate service providers between servicing a prior candidate shuttle service route and servicing the candidate service route; and/or

minimizing a travel distance and/or travel time by the candidate service providers between servicing the candidate service route and a next candidate shuttle service route.

28. A method of managing a shuttle service, the method being implemented by one or more processors, the method comprising:

operating one or more non-shuttle service request identifiers to search a database of historic transport-related requests to identify a plurality of historic non-shuttle service requests, each historic non-shuttle service request including a start time and a route defined by at least an origin location and a destination location, wherein the one or more processors are configured to be in communication with the database;

operating one or more potential user selectors to select one or more potential users for a shuttle service, one or more of the selected potential users being identified as a price-sensitive user;

operating one or more non-shuttle service request selectors to select one or more of the historic non-shuttle service requests, one or more of the selected historic non-shuttle service requests being:

a request previously sent by a user computing device of one of the selected potential users identified as being a price sensitive user; and/or

a request that was not allocated, not matched, and/or cancelled; and

operating one or more candidate service route generators to derive a candidate shuttle service route for use in providing the shuttle service, the candidate shuttle service route derived based on one or more of the selected historic non-shuttle service requests that were previously sent by user computing devices of one or more of the selected potential users identified as being a price-sensitive user.

29. The method of claim 28, wherein each selected historic non-shuttle service request includes at least a portion of its route in common with one or more other selected historic non-shuttle service requests.

30. The method of claim 28, wherein

the deriving of the candidate shuttle service route is based on at least the start time, route, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

31. The method of claim 28, wherein the selecting of the one or more historic non-shuttle service requests is based on those historic non-shuttle service requests having:

start times within a first threshold time period;

origin locations located within a first threshold area; and/or

destination locations located within a second threshold area.

32. The method of claim 28, wherein operating the one or more candidate service route generators further comprises deriving a start time for the candidate shuttle service route, an origin location for the candidate shuttle service route, and a destination location for the candidate shuttle service route;

wherein the start time for the candidate shuttle service route, the origin location for the candidate shuttle service route, and the destination location for the candidate shuttle service route are derived based on the start time, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

33. The method of claim 32, wherein operating the one or more candidate service route generators further comprises deriving one or more drop off and/or one or more pickup locations between the origin location for the candidate shuttle service route and destination location for the candidate shuttle service route;

wherein the one or more drop off and/or one or more pickup locations are derived based on the start time, origin location, and/or destination location of one or more of the selected historic non-shuttle service requests.

34. The method of claim 28, wherein one or more of the following apply:

one or more of the selected historic non-shuttle service requests include requests for taxi service, private car service, and/or ride share service; and/or

each historic non-shuttle service request is a transport-related request that is not a request for shuttle service.

35. The method of claim 28, wherein

the database of historic transport-related requests further includes a plurality of historic shuttle service requests; and

the deriving of the candidate shuttle service route is further based on one or more of the historic shuttle service requests.

36. The method of claim 28, wherein operating the one or more candidate service route generators further comprises

refining the candidate service route so as to minimize a quantity of pickups and/or drop offs along the candidate service route.

37. The method of claim 36, wherein the refining of the candidate service route includes adjusting the start time for the candidate shuttle service route, adjusting the origin location for the candidate shuttle service route, and/or adjusting the destination location for the candidate shuttle service route.

38. The method of claim 28, further comprising operating one or more user-side notification and booking controllers to

communicate to user computing devices of one or more of the selected potential users, the communicating including providing information pertaining to the candidate shuttle service route and/or an opportunity to receive shuttle service on the candidate shuttle service route.

39. The method of claim 28, further comprising operating a candidate service provider selector to perform a service provider matching process to match a service provider with the candidate shuttle service route.

40. The method of claim 39, wherein the service provider matching process is based on one or more of the following:

minimizing a travel distance and/or travel time by the matched service provider between servicing a prior candidate shuttle service route and servicing the candidate service route; and/or

minimizing a travel distance and/or travel time by the matched service provider between servicing the candidate service route and a next candidate shuttle service route.

41. A method of managing a shuttle service, the method being implemented by one or more processors, the method comprising:

operating one or more non-shuttle service request identifiers to search a database of historic transport-related requests to identify a plurality of historic non-shuttle service requests received from a user computing devices of a plurality of users, each historic non-shuttle service request including a start time and a route defined by at least an origin location and a destination location, wherein the one or more processors are configured to be in communication with the database;

operating one or more potential user selectors to perform an analysis to identify one or more price-sensitive users;

operating one or more potential user selectors to select one or more potential users for a shuttle service, at least one of the selected potential users being identified as a price-sensitive user;

operating one or more non-shuttle service request selectors to select one or more of the historic non-shuttle service requests based on one or more of the following:

the historic non-shuttle service request is a request previously sent by user computing devices of one or more of the selected potential users identified as being a price-sensitive user;

the historic non-shuttle service request is a request that was not allocated, not matched, and/or cancelled; and/or

the historic non-shuttle service request has at least a portion of its route in common with one or more other selected historic non-shuttle service requests; and

operating one or more candidate service provider selectors to select one or more candidate service providers available to service one or more of the selected historic non-shuttle service requests;

operating one or more candidate shuttle service route generators to derive one or more candidate shuttle service routes, the one or more candidate shuttle service routes derived based on one or more of the selected historic non-shuttle service requests;

operating one or more candidate shuttle service route selectors to select one of the candidate shuttle service routes for use in providing the shuttle service, the selected candidate shuttle service route selected based on one or more of the selected candidate service providers.