What is being claimed is:

1. A method for monitoring a vehicle that is operating to provide a transport service to a passenger, the method being implemented by one or more processors and comprising:

monitoring an interior of the vehicle for an interval of time that includes the vehicle arriving at a destination;

wherein monitoring the interior of the vehicle includes determining, from one or more sensors of the vehicle, that an object which should be removed from the vehicle after completion of the transport service is in the vehicle; and while the vehicle is operating, automatically initiating, based at least in part on a location of the vehicle, a remedial action to have the passenger remove the object after the vehicle arrives at the destination.

2. The method of claim 1, wherein the one or more sensors of the vehicle includes one or more of (i) a set of cameras, (ii) a set of weighing devices, (iii) a set of suspension sensors, (iv) a set of light detection and ranging (LIDAR) sensors, (v) a set of radio-frequency transceivers, or (vi) a set of ultrasound sensors.

3. The method of claim 1, wherein determining that the object is in the vehicle includes detecting a position of the object inside the vehicle based on image information from a set of cameras that is positioned within the vehicle.

4. The method of claim 1, wherein determining that the object is in the vehicle includes detecting that the object has been placed in a trunk of the vehicle.

5. The method of claim 4, wherein detecting that the object has been placed in the trunk includes using a trunk sensor that detects when the trunk is opened and closed.

6. The method of claim 5, wherein detecting that the object has been placed in the trunk includes using one or more sensors that are positioned to monitor the trunk.

7. The method of claim 5, wherein performing the remedial action includes automatically opening the trunk for the passenger when the vehicle is at the destination.

8. The method of claim 1, wherein determining that the object is in in the vehicle is based on compression information, detected by a set of sensors that are positioned to detect compression of a portion of the vehicle.

9. The method of claim 1, wherein determining that the object is in the vehicle includes determining that an electronic device is in the vehicle based on radio-frequency signals emitted by the object.

10. The method of claim 1, wherein determining that the object is in the vehicle includes determining a first set of information from a first sensor set of the vehicle when the transport service is being provided, and determining a second set of information from the first sensor set of the vehicle after the transport service arrives at the destination, and comparing the first set of sensor information to the second set of information.

11. The method of claim 1, wherein automatically initiating performance of the remedial action includes communicating, over one or more networks, a message to a computing device associated with the passenger, the message notifying the passenger that the object is in the vehicle.

12. The method of claim 11, wherein automatically initiating performance of the remedial action includes:

after the vehicle arrives at the destination, causing the vehicle to remain stationary at a selected location until the object is detected as being removed from the vehicle.

13. The method of claim 12, wherein automatically initiating performance of the remedial action includes causing the vehicle to travel to the selected location to await removal of the object by the passenger.

14. The method of claim 1, wherein determining that the object is in the vehicle includes capturing one or more images of a portion of the vehicle using one or more cameras of the vehicle, and performing image analysis to detect the object from the one or more images.

15. The method of claim 1, further comprising:

determining, from one or more sensors of the vehicle, when the object is initially placed in the vehicle by a passenger who enters the vehicle at a pickup location.

16. The method of claim 15, wherein detecting when the object is initially placed in the vehicle is performed in response to one of (i) detecting that the passenger has entered the vehicle, (ii) detecting that a predetermined duration of time has elapsed since detecting that the passenger has entered the vehicle, (iii) receiving, from a computing device associated with the passenger, a message indicating that the service can begin as a result of an input being provided at the computing device associated with the passenger, (iv) receiving, from a computing device associated with the vehicle, a message indicating that the service can begin as a result of an input being provided at the computing device associated with the vehicle from the passenger within the vehicle, or (v) determining that the vehicle has been positioned within a predetermined distance of the pickup location for a predetermined duration of time based on location information of the vehicle.

17. The method of claim 1, wherein determining that the object is in the vehicle includes detecting placement of the object in any of multiple possible locations within the vehicle, including placement in a seat, a floor area or a trunk of the vehicle.

18. A method for monitoring a vehicle that is operating to provide a transport-service, the method being implemented by one or more processors of an on-board computing system of the vehicle, the method comprising:

receiving, from a remote system, instructions for the vehicle to transport one or more objects or individuals from a start location to a destination;

after the vehicle arrives at or is within a first predetermined distance of the start location, detecting that an object has been placed within the vehicle based on a first set of information from one or more sensors of the vehicle;

controlling the vehicle to travel from the start location to the destination;

after the vehicle arrives at or is within a second predetermined distance of the destination, making a determination of whether the object is present in the vehicle based on a second set of information from the one or more sensors; and

in response to the determination of the object being present, and while the vehicle is in operation, automatically initiating performance of a remedial action.

19. The method of claim 18, wherein the one or more sensors of the vehicle includes one or more of (i) a set of cameras, (ii) a set of weighing devices, (iii) a set of suspension sensors, (iv) a set of light detection and ranging (LIDAR) sensors, (v) a set of radio-frequency transceivers, or (vi) a set of ultrasound sensors.

20. The method of claim 18, wherein automatically initiating performance of a remedial action includes capturing one or more images of the object using a set of cameras that are directed to an interior of the vehicle, and (ii) communicating, over one or more networks, a message that includes the one or more images, to at least one of the remote system or a computing device associated with a passenger receiving the transport service.

21. The method of claim 18, wherein detecting that the object has been placed within the vehicle includes detecting that the object has been placed in a trunk of the vehicle.

22. The method of claim 21, wherein detecting that the object has been placed in the trunk includes using one or more sensors that are positioned to monitor the trunk.

23. The method of claim 22, wherein detecting that the object has been placed in the trunk includes using a trunk sensor that detects when the trunk is opened and closed.

24. The method of claim 23, wherein performing the remedial action includes automatically opening the trunk for a passenger when the vehicle is at the destination.

25. The method of claim 18, wherein automatically initiating performance of the remedial action includes communicating, over one or more networks, a message to at least one of the

remote system, or a computing device associated with a user that requested the service, the message notifying the user that an item has been left in the vehicle.

26. A non-transitory computer-readable medium storing instructions that, when executed by one or more processors of an on-board computing system of a vehicle, causes the computing system to:

receive, from a remote system, instructions for the vehicle to transport one or more objects or individuals from a start location to a destination;

after the vehicle arrives at or is within a first predetermined distance of the start location, detect that an object has been placed within the vehicle based on a first set of information from one or more sensors of the vehicle;

control the vehicle to travel from the start location to the destination;

after the vehicle arrives at or is within a second predetermined distance of the destination, make a determination as to whether the object is present in the vehicle based on a second set of information from the one or more sensors; and

in response to the determination that the object is present in the vehicle, and while the vehicle is in operation, automatically perform a remedial action.