WHAT IS CLAIMED IS:

1. A computer-implemented method comprising:

providing a visualization comprising a representation of a vehicle and a representation of a physical environment associated with the vehicle, the visualization including an array of graphical elements each having an attribute indicating an unoccupied state;

receiving, from at least one sensor of the vehicle, sensor data associated with the physical environment; determining, based on the sensor data, a position of at least one object in the physical environment relative to the vehicle; and

altering the attribute for each of one or more graphical elements included in the array of graphical elements, each of the one or more graphical elements corresponding to the position of the at least one object.

2. The computer-implemented method of claim 1, wherein altering the attribute for each of the one or more graphical elements comprises incrementally modifying the attribute of the respective graphical element based at least in part on a length of time that the object occupies the position relative to the vehicle.

3. The computer-implemented method of claim 1, wherein altering the attribute for each of the one or more graphical elements comprises modifying a color of the respective graphical element.

4. The computer-implemented method of claim 1, wherein altering the attribute for each of the one or more graphical elements comprises modifying a size of the respective graphical element.

5. The computer-implemented method of claim 1, wherein altering the attribute for each of the one or more graphical elements comprises modifying a position of the respective graphical element.

6. The computer-implemented method of claim 1, wherein the vehicle comprises an autonomous vehicle.

7. The computer-implemented method of claim 6, wherein providing the visualization comprises predicting, based on data received from at least one system of the autonomous

vehicle, a projected direction of travel of the autonomous vehicle, wherein the visualization further comprises a representation of the projected direction of travel of the autonomous vehicle.

8. The computer-implemented method of claim 1, wherein receiving the sensor data associated with the physical environment comprises receiving incomplete sensor data from a third-party source that does not comprise complete sensor data perceived by sensors of the vehicle.

9. The computer-implemented method of claim 1, wherein receiving the sensor data associated with the physical environment comprises receiving sensor data from a third-party source that is not formatted in a way that is conducive for generating the visualization; and wherein the method further comprises extracting, from the sensor data from the third-party source, relevant data to generate the visualization.

10. The computer-implemented method of claim 1, wherein the representation of the physical environment associated with the vehicle comprises a representation of the physical environment associated with the vehicle that is within a limited radius around the vehicle.

11. The computer-implemented method of claim 10, further comprising:

determining, based on the sensor data, a position of an object outside the limited radius around the vehicle; and

altering the attribute for each of an additional one or more graphical elements included in the array of graphical elements, the altered additional one or more graphical elements providing a representation of the object within the visualization that is outside of the representation of the physical environment.

12. The computer-implemented method of claim 1, wherein the representation of the physical environment associated with the vehicle comprises a representation of the physical environment starting beyond a predetermined radius around the vehicle.

13. The computer-implemented method of claim 1, wherein providing the visualization comprises sending the visualization to a mobile computing device associated with a passenger within the vehicle.

14. The computer-implemented method of claim 1, wherein providing the visualization comprises: sending the visualization to the vehicle; and displaying the visualization on a display device associated with the vehicle.

15. A system comprising:

a display module, stored in memory, that provides a visualization comprising a representation of a vehicle and a representation of a physical environment associated with the vehicle, the visualization including an array of graphical elements each having an attribute indicating an unoccupied state;

a receiving module, stored in memory, that receives, from at least one sensor of the vehicle, sensor data associated with the physical environment;

a determination module, stored in memory, that determines, based on the sensor data, a position of at least one object in the physical environment relative to the vehicle;

a transformation module, stored in memory, that alters the attribute for each of one or more graphical elements included in the array of graphical elements, each of the one or more graphical elements corresponding to the position of the at least one object; and

at least one physical processor that executes the display module, the receiving module, the determination module, and the transformation module.

16. The system of claim 15, wherein the transformation module alters the attribute for each of the one or more graphical elements by incrementally modifying the attribute of the respective graphical element based at least in part on a length of time that the object occupies the position relative to the vehicle.

17. A computer-readable medium comprising computer-readable instructions that, when executed by at least one processor of a computing device, cause the computing device to:

provide a visualization comprising a representation of a vehicle and a representation of a physical environment associated with the vehicle, the visualization including an array of graphical elements each having an attribute indicating an unoccupied state;

receive, from at least one sensor of the vehicle, sensor data associated with the physical environment; determine, based on the sensor data, a position of at least one object in the physical environment relative to the vehicle; and

alter the attribute for each of one or more graphical elements included in the array of graphical elements, each of the one or more graphical elements corresponding to the position of the at least one object.

18. The computer-implemented method of claim 1, wherein the one or more graphical elements provide a representation of a low-fidelity version of the sensor data.

19. The computer-implemented method of claim 1, wherein the attribute for each graphical element included in the array of graphical elements is a size attribute; and wherein indicating an unoccupied state comprises each graphical element included in the array of graphical elements having a uniform size as provided by the size attribute.

20. The computer-implemented method of claim 1, wherein the array of graphical elements is a grid of shapes.