CLAIMS

1. A method comprising:

generating a navigation path for a vehicle;

identifying a target region of an environment of the vehicle to be monitored for presence of moving objects, wherein the vehicle includes a plurality of sensors, and wherein identifying the target region is based on the generated navigation path;

causing a first sensor of the plurality of sensors to scan a portion of the environment associated with the target region;

based on at least the scan by the first sensor, selecting one of the plurality of sensors for monitoring the target region; and

causing the selected one of the plurality of sensors to monitor the target region for presence of moving objects.

2. The method of claim 1, wherein selecting one of the plurality of sensors for monitoring the target region comprises:

determining, based on at least the scan by the first sensor, that the selected one of the plurality of sensors has a sufficiently clear view of the target region.

3. The method of claim 1, wherein the portion of the environment scanned by the first sensor includes an intermediate region between the vehicle and the target region, and wherein selecting one of the plurality of sensors for monitoring the target region comprises:

determining, based on at least the scan by the first sensor, that the selected one of the plurality of sensors is not occluded by one or more objects in the intermediate region.

4. The method of claim 1, wherein the portion of the environment scanned by the first sensor includes at least a portion of the target region, and wherein selecting one of the plurality of sensors for monitoring the target region comprises:

determining, based on at least the scan by the first sensor, that the selected one of the plurality of sensors is not occluded by one or more objects in the target region.

5. The method of claim 1, wherein the portion of the environment scanned by the first sensor includes one or more regions of the environment adjacent to the target region, and wherein selecting one of the plurality of sensors for monitoring the target region is based on at least the scan of the one or more regions by the first sensor.

6. The method of claim 1, further comprising:

adjusting the portion of the environment scanned by the first sensor based on at least a field-of-view (FOV) of a second sensor of the plurality of sensors.

7. The method of claim 1, wherein selecting one of the plurality of sensors for monitoring the target region is further based on the selected one of the plurality of sensors having a field-of-view (FOV) that at least partially overlaps with the target region.

8. The method of claim 1, wherein selecting one of the plurality of sensors for monitoring the target region is further based on a mounting position of the selected one of the plurality of sensors in the vehicle.

9. The method of claim 1, wherein selecting one of the plurality of sensors comprises selecting a second sensor of the plurality of sensors, and wherein selecting the second sensor is further based on a scan of the environment by the second sensor.

10. The method of claim 1, wherein the scan by the first sensor is a first scan, wherein selecting one of the plurality of sensors comprises selecting a second sensor of the plurality of sensors, the method further comprising:

while the second sensor is monitoring the target region for presence of moving objects, causing the first sensor to obtain a second scan associated with the target region.

11. The method of claim 10, further comprising:

based on at least the second scan, selecting another sensor of the plurality of sensors for monitoring the target region; and

causing the selected another sensor to monitor the target region for presence of moving objects.

12. The method of claim 10, wherein causing the first sensor to obtain the second scan is in response to passage of at least a threshold amount of time after the first scan.

13. The method of claim 10, wherein causing the first sensor to obtain the second scan is in response to the vehicle moving at least a threshold distance after the first sensor obtains the first scan.

14. The method of claim 1, wherein the target region is a first target region, wherein the selected one of the plurality of sensors is a second sensor of the plurality of sensors, the method further comprising:

identifying a second target region of the environment to be monitored for presence of moving objects;

causing the first sensor to scan a second portion of the environment associated with the second target region;

selecting, based on at least the scan of the second portion of the environment by the first sensor, another sensor of the plurality of sensors for monitoring the second target region; and

while the second sensor is monitoring the first target region, causing the selected another sensor to monitor the second target region for presence of moving objects.

15. The method of claim 1, wherein causing the selected one of the plurality of sensors to monitor the target region for presence of moving objects comprises:

detecting moving objects in the target region based on data from the selected one of the plurality of sensors.

16. The method of claim 1, further comprising:

causing the vehicle to perform a navigation maneuver, wherein causing the selected one of the plurality of sensors to monitor the target region for presence of moving objects comprises:

using the selected one of the plurality of sensors to obtain one or more scans of the target region while the vehicle is performing the navigation maneuver.

17. The method of claim 1, further comprising:

causing the vehicle to perform a navigation maneuver, wherein causing the selected one of the plurality of sensors to monitor the target region for presence of moving objects comprises:

using the selected one of the plurality of sensors to obtain one or more scans of the target region prior to the vehicle performing the navigation maneuver.

18. The method of claim 1, further comprising:

detecting an object in the target region; and

identifying the object as a moving object.

19. The method of claim 18, wherein identifying the object as the moving object is based on the object being detected using the one of the plurality of sensors selected for monitoring the target region.

20. A system comprising:

a plurality of sensors configured to scan respective portions of an environment of a vehicle;

one or more processors; and

data storage storing instructions that, when executed by the one or more processors, cause the system to perform operations comprising:

generating a navigation path for the vehicle;

identifying a target region of the environment to be monitored for presence of moving objects, and wherein identifying the target region is based on the generated

navigation path;

using a first sensor of the plurality of sensors to scan a portion of the environment associated with the target region;

selecting, based on at least the scan by the first sensor, one of the plurality of sensors for monitoring the target region; and

using the selected one of the plurality of sensors to monitor the target region for presence of moving objects.

21. The system of claim 20, wherein the first sensor is a light detection and ranging (LIDAR) sensor, and wherein the selected one of the plurality of sensors is a radio detection and ranging (RADAR) sensor.

22. The system of claim 21, wherein the LIDAR sensor is mounted on a top side of the vehicle, and wherein the RADAR sensor is mounted on a side of the vehicle other than the top side.

23. A non-transitory computer readable medium having stored therein instructions, that when executed by a computing device, cause the computing device to perform operations comprising:

generating a navigation path for a vehicle;

identifying a target region of an environment of the vehicle to be monitored for presence of moving objects, wherein the vehicle includes a plurality of sensors, and wherein identifying the target region is based on the generated navigation path;

operating a first sensor of the plurality of sensors to obtain a scan of a portion of the environment associated with the target region;

based on at least the scan obtained by the first sensor, selecting one of the plurality of sensors for monitoring the target region; and

operating the selected one of the plurality of sensors to monitor the target region for presence of moving objects.

24. The non-transitory computer readable medium of claim 23, wherein the portion of the environment scanned by the first sensor includes an intermediate region between the vehicle and the target region.