Requirements List:

1. The Adaptive Driving Beam (ADB) shall dim vehicle headlights dynamically.
    1.1. The ADB shall adjust the beam pattern in the event of oncoming vehicle detection.
    1.2. The ADB shall adjust the beam pattern in the event of trailing a vehicle closely in the same lane.
    1.3. The ADB shall adjust the beam pattern in accordance with inclement weather conditions.
2. The ADB shall revert to low-beam mode in the event of sensor failure.
    2.1. The ADB shall alert the driver of reverting to low-beam mode.
3. The ADB shall integrate with front-facing cameras and other applicable sensors on the vehicle to distinguish events.
4. The ADB shall be equipped with a cybersecurity subsystem that should be capable of protection, monitoring, detection, and mitigation of cyber threats.
    4.1. The ADB's cybersecurity subsystem should all for secure communication between subsystems, authentication protocols for system updates, and real-time threat detection mechanisms.

Global Invariant Requirements:

1. Requirement 2, "The ADB shall revert to low-beam mode in the event of sensor failure." This is an invariant as this is a safety critical system, and failure to adjust to unforeseen circumstances could cause harm in some capacity.
2. Requirement 3, "The ADB shall integrate with front-facing cameras and other applicable sensors on the vehicle to distinguish events." This is an invariant as these cameras and sensors are pivotal to the system and should always be active.
3. Requirement 4.1, "The ADB's cybersecurity subsystem should all for secure communication between subsystems, authentication protocols for system updates, and real-time threat detection mechanisms." This is an invariant because in all instances where the ADB is used, secure communication and authentication will be used.

Questions:

1. Will the system require invocation by the operator of the vehicle, or should ADB be enabled by default on start?
2. The description seems to refer mostly to highway/low visibility driving. If the ADB is active in an urban area, should the system be able to detect a pedestrian, cyclist, or similar and function as intended with vehicles?
3. In a scenario in which multiple ADB triggering events are occurring or have occurred, which events take precedence (e.g., turns, weather, vehicle detection all at once).