TABLE 5.6 Information from Other Vehicles

Application	Types of Communication	Transmission Mode	Minimum Frequency (Hz)	Allowable Latency (ms)	Data to be Transmitted and/or Received	Maximum Required Range (m)
Cooperative Forward Collision Warning	V2V One-way One-to-many	Periodic	~ 10	~ 100	position, velocity, acceleration, heading, yaw-rate	~ 150
Vehicle-Based Road Condition Warning	V2V One-way One-to-many	event-driven	~ 2	~ 500	position, heading, road condition parameters	~ 400
Emergency Electronic Brake Lights	V2V One-way One-to-many	event-driven	~ 10	~ 100	position, heading, velocity, deceleration	~ 300
Lane Change Warning	V2V One-way One-to-many	Periodic	~ 10	~ 100	position, heading, velocity, acceleration, turn signal status	~ 150
Blind Spot Warning	V2V One-way One-to-many	Periodic	~ 10	~ 100	velocity, position, heading, acceleration, turn signal status	~ 150
Highway Merge Assistant	V2V One-way One-to-many	Periodic	~ 10	~ 100	position, speed and heading	~ 250
Visibility Enhancer	V2V One-way One-to-many	Periodic	~ 2	~ 100	velocity, position, heading	~ 300

TABLE 5.6 (continued)

Application	Types of Communication	Transmission Mode	Minimum Frequency (Hz)	Allowable Latency (ms)	Data to be Transmitted and/or Received	Maximum Required Range (m)
Cooperative Collision Warning	V2V One-way One-to-many	Periodic	~ 10	~ 100	position, velocity, acceleration, heading, yaw-rate	~ 150
Cooperative Vehicle-Highway Automation System (Platoon)	V2V and I2V One-way and two-way One-to-one and one-to-many	Periodic	~ 50	~ 20	position, velocity, acceleration, heading, yaw-rate	~ 100
Cooperative Adaptive Cruise Control	V2V and I2V One-way One-to-many	Periodic	~ 10	~ 100	position, velocity, acceleration, heading, yaw-rate	~ 150
Road Condition Warning	I2V One-way One-to-many	event-driven	~ 1	~ 1000	road condition warning message	~ 200
Pre-Crash Sensing	V2V Two-way One-to-one	event-driven	~ 50	~ 20	vehicle type, position, velocity, acceleration, heading, yaw-rate	~ 50
Highway/Rail Collision Warning	I2V or V2V One-way One-to-many	event-driven or Periodic	~ 1	~ 1000	position, heading, velocity	~ 300
V2V Road Feature Notification	V2V One-way One-to-one	event-driven	~ 2	~ 500	position, heading, road feature parameters	~ 400