Summary of Geotab Checkmate Rules to Alert Management Regarding Violations of:

- **Driver and Passenger Safety and Vehicle Abuse Rules:**

  Safety and vehicle abuse rules relate to changing driving behaviour to reduce accident risk.

	IMPACT					
Rule broken: Alert management	**Fuel costs**	**Repair costs**	**Insurance costs (with accident)**	**Company Image (if branded)**	**Employee & public safety**	**Profits**
Harsh Braking	Y	Y	Y	Y	Y	Y
Hard Acceleration	Y	Y	Y	Y	Y	Y
Harsh Cornering	Y	Y	Y	Y	Y	Y
Speeding	Y	Y	Y	Y	Y	Y
Seatbelt not Used			Y		Y	Y
After Hours Usage	Y		Y			Y
Possible Accident		Y	Y	Y	Y	Y

- **Productivity Rules:**

  Productivity rules measure what the driver is doing, ie. time on the road, engine idling, at customer site vs office.

	IMPACT						
Rule broken: Alert management	**Fuel costs**	**Repair costs**	**Employee wage costs**	**Company Image (if branded)**	**Customer Service***	**Employee & public safety**	**Profits**
Engine Idling	Y	Y	Y	Y	Y	Y	Y
Late Arrival			Y	Y	Y		Y
Early Leave			Y	Y	Y		Y
Unauthorized Home Stops	Y	Y	Y		Y	Y	Y
Too Much Office Time			Y		Y	Y	Y
Long Lunch	Y		Y		Y		Y
Long Stops During Work Hours		Y	Y	Y	Y	Y	Y

- **Fleet Rules:**

  Fleet rules relate to the vehicle and its health.

	IMPACT						
Rule broken: Alert management	**Fuel costs**	**Repair costs**	**Employee wage costs**	**Company Image (if branded)**	**Customer Service***	**Employee & public safety**	**Profits**
Fleet Idling	Y	Y	Y	Y	Y	Y	Y
Engine Light On	Y	Y			Y		Y
Battery Drain		Y	Y		Y		Y
Unauthorized Device Removal	Y	Y	Y	Y	Y	Y	Y
Engine Abuse	Y	Y	Y	Y	Y	Y	Y

* Additionally, Customer service is affected if the vehicle is taken off the road due to an accident, repair or maintenance. The GPS tracking system helps reduce these incidents, therefore making the vehicle available for servicing the customer.

Summary of Geotab Checkmate Rules to Alert Management Regarding Violations of:

Driver and Passenger Safety and Vehicle Abuse Rules:

Safety and vehicle abuse rules relate to changing driving behaviour to reduce accident risk.

Harsh Braking

When set to Passenger Car, the rule will trigger when there is a drop in speed of 17 km/h or 10 mph in a single second. A force of ½ G would be exerted on the vehicle. The driver would be thrown forward towards the steering wheel and any vehicle load would shift to the front. Lose objects on the seat would likely be thrown to the floor.

Hard Acceleration

When set to Passenger Car, the rule will trigger when speed increases 16 km/h or 10 mph in a single second. A force of ½ G would be exerted on the vehicle. The driver would be thrown back into their seat and the load could shift.

Harsh Cornering

When set to Passenger Car, the rule will trigger when a hard or aggressive turn causes a force greater than ½ G to be exerted on the vehicle. A light duty passenger vehicle making a 90 degree right hand turn above 40 km/h or 25 mph would trigger the rule. The load could shift and unrestrained objects on the seat could be thrown.

Speeding

Speed is monitored against the posted road speed. Posted road speed information is not always accurate so the threshold should be at least about 10 km/h or 6 mph over the posted speed. If there is no posted road speed information for a section of a trip then no violation will be logged there.

Seatbelt not Used

This rule is triggered when the driver isn't wearing a seatbelt while the vehicle is moving faster than 8 km/h or 5 mph.
NOTE: This rule is based on the status of the seatbelt that is communicated by the ECM. Not all vehicles transmit information about the seatbelt.

After Hours Usage

This rule is triggered when a vehicle is driven outside work hours. Different vehicles can have different work hours or work days.

Possible Accident

This rule is triggered if the accelerometer detects a change in speed of more than 25 km/h or 15 mph in 1 second in any direction. If possible the device will send detailed forensic information about position, speed and acceleration of the vehicle. False alarms are possible.
CAUTION: Knocking the device can trigger the rule. Install the device out of the driver's way.

Productivity Rules:

Productivity rules measure what the driver is doing, ie. time on the road, engine idling, at customer site vs office.

Engine Idling

This rule identifies preventable idling. In addition to reducing wasted gas and cutting greenhouse emissions, idling is often associated unproductive drivers. The default allowed idle duration is 5 minutes.

Summary of Geotab Checkmate Rules to Alert Management Regarding Violations of:

Late Arrival

This rule identifies late arriving at "Office" type zones. Set the times between which late arrival triggers here Edit Late Arrival Hours. The default is 9:30 to 10:30.

Early Leave

This rule identifies early departures from "Office" type zones. Set the times between which early departure triggers here Edit Early Leave Hours. The default is 16:00 to 16:45.

Unauthorized Home Stops

This rule identifies stops at "Home" type zones during the the vehicles work hours

Too Much Office Time

This rule identifies long stops at "Office" type zones during working hours. Edit Work Hours. The default maximum stop time is 90 minutes.

Long Lunch

This rule identifies vehicles that take a long lunch break Edit Lunch Hours. The default disallowed times are between the hours of 11:00 and 14:00 and stops that last longer than 60 minutes.

Long Stops During Work Hours

This rule identifies long stops during the regular work hours of the vehicle Edit Work Hours. The default is to limit stops to 60 minutes.

Fleet Rules:

Fleet Idling

This rule identifies preventable idling with an option to limit to specified locations (zones with the "Office" zone type). In addition to reducing wasted gas and cutting greenhouse emissions, idling is often associated unproductive drivers. The default allowed idle duration is 5 minutes. Many fleets find a significant portion of engine idle occurs within their own depots for example before the day begins while the driver is completing paperwork.

Engine Light On

This identifies vehicles being driven with the "Check Engine" light on and can be used to schedule maintenance or prevent serious damage.

Battery Drain

This rule triggers when a vehicle is having its battery drained. If the battery voltage drops below 11.5 volts the rule is triggered. This can prevent vehicles that have their lights on and if left wouldnt start (alert the vehicle manager) or identify vehicles with battery problems.

Unauthorized Device Removal

This rule identifies a GO device has been unplugged and later plugged in. If the vehicle has been in for maintenance, it is safe to disregard the exception. The device will only send the notification once it has been plugged back in. The drivers could be unplugging the device in an attempt to prevent monitoring.
NOTE: The Watchdog Report can be used to identify assets that are currently unplugged.

Engine Abuse

The rule identifies over revving of the engine. This rule will be violated if the RPMs go over 7000.