

GEO TAB

Selling and Supporting Safety

Four Growth Pillars



4 core pillars drive Geotab's ongoing innovation, which helps businesses make impactful improvements:

1. Driver Safety
2. Productivity
3. Compliance
4. Fleet Optimization

Safety Pillar – Where to Find the ROI

- More accidents = higher insurance premiums
- Replacement vehicle rental costs.
- Workers compensation claim cost.
- Bent metal costs.
- Overtime/temporary employees.
- Damage to cargo.
- Insurance deductibles.
- Administrative cost for processing claim.
- Lost workdays.
- Delayed delivery/reorder costs.
- Rush order replacements.
- Legal fees.
- Punitive damages.
- Any other liability costs.
- Wear and tear on the vehicle/brakes.

Safety Pillar – Orkin Article

The Orkin article (link below) is a fantastic source for how managing safety can save an organization money.

This article can be found at www.geotab.com under Resources, under Article Topics.

<http://www.geotab.com/geodownloads/resources/articles/Rollins-Orkin-Geotab-Technology.pdf>

- Orkin is saving 25 million dollars/year in claim costs.
- 9% fuel reduction
- 50% reduction in accidents
- Orkin sets the rules and uses our system to strictly monitor any and all rule deviations.
- Seatbelt use
- Speeding
- Harsh braking

Safety Pillar – Prevention is Key

Managing the below will assist with prevention of accidents, speeding tickets and, therefore, lower unnecessary spending on safety related driving actions.

- Monitoring speed
- Monitoring seatbelt
- Harsh braking
- Harsh acceleration
- Harsh cornering
- Late night driving (10:00pm to 4:00am is considered drowsy driving hours)
- Reversing
- Accident recording.

Safety Pillar – Company Policy

- Company's usually have safety policy's in place.
- Does that extend to their fleet?
- Are they aware of what happens with the vehicle after the vehicle leaves the building?
- If not, we can assist in building a fleet safety policy.
- If so, we can assist in monitoring and managing that policy.

Safety Pillar – Driver Programs

Two types of driver training programs.

- 1) Heavy Handed – where the company defines the rules and sets the beeping to coincide across the entire fleet. Usually occurs when an organization is experiencing large costs due to accidents/tickets etc.
- 2) Driver Training Program – where the company defines their rules, creates a scorecard based on those rules and monitors and manages the drivers weekly/monthly. They would then turn the beeper on by driver to improve their behavior. A little bit of a softer approach.
- 3) Incent the driver(s) that drive safely.

DRIVER FEEDBACK

On Off Enable/Disable all beeping.

On Off Enable driver identification reminder.

On Off Beep on engine rpm.
Over: Rpm

On Off Beep when idling for a period of time.

On Off Enable speed warning.
Start Beeping: mph
Stop Beeping: mph
Beep briefly when approaching warning speed.

On Off Beep on dangerous driving.

Passenger Car **Truck/Cube Van** **Heavy Duty**

On Off Beep when seat belt not used.
Above: mph
Monitor both passenger and driver seatbelts

On Off Beep when reversing

Safety Pillar – Driver Programs

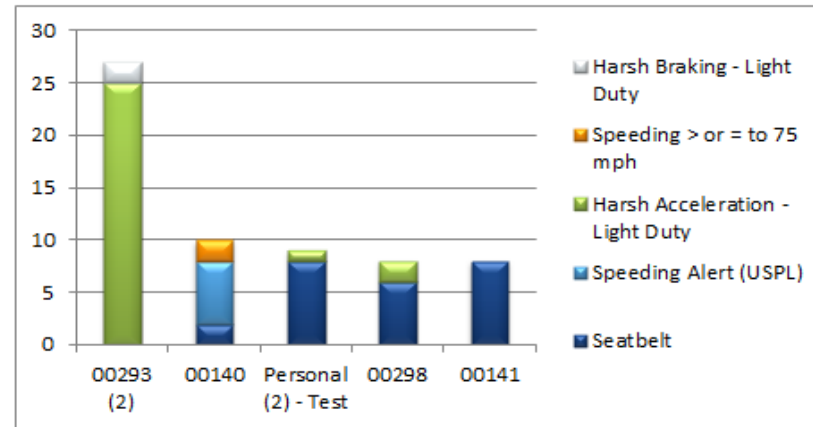
Can use Geotab’s flexible reporting functionality to create a driver score card that will make it easier for management levels to see who needs some driver training.

Asset	Driving > 10 Hours	Harsh Acceleration	Harsh Braking	Seatbelt Off	Speed > or = 72	Speed > or = 75 mph	Total Events
Vehicle 1	0	78	5	1	0	0	84
Vehicle 2	0	0	2	66	8	2	78
Vehicle 3	0	16	0	29	18	2	65
Vehicle 4	0	40	2	0	0	2	44
Vehicle 5	0	0	0	18	7	2	27
Vehicle 6	0	15	0	0	1	2	18
Vehicle 7	0	6	0	0	7	3	16
Vehicle 8	0	10	0	1	0	1	12
Vehicle 9	0	4	1	5	1	0	11
Vehicle 10	0	2	0	8	0	0	10
Vehicle 11	0	1	8	1	0	0	10
Vehicle 12	0	1	2	7	0	0	10
Vehicle 13	0	9	0	0	0	1	10
Vehicle 14	0	4	0	0	1	2	7
Vehicle 15	0	0	0	4	0	3	7
Vehicle 16	0	4	2	0	0	0	6
Vehicle 17	0	1	0	0	0	3	4
Vehicle 18	0	2	0	0	0	0	2
Vehicle 19	0	0	2	0	0	0	2
Vehicle 20	0	1	0	0	0	0	1
Vehicle 21	0	1	0	0	0	0	1
Vehicle 22	0	0	0	0	0	0	0
Vehicle 23	0	0	0	0	0	0	0
Vehicle 24	0	0	0	0	0	0	0
Vehicle 25	0	0	0	0	0	0	0
Vehicle 26	0	0	0	0	0	0	0
Vehicle 27	0	0	0	0	0	0	0
Vehicle 28	0	0	0	0	0	0	0
Grand Total	0	195	24	140	43	23	425

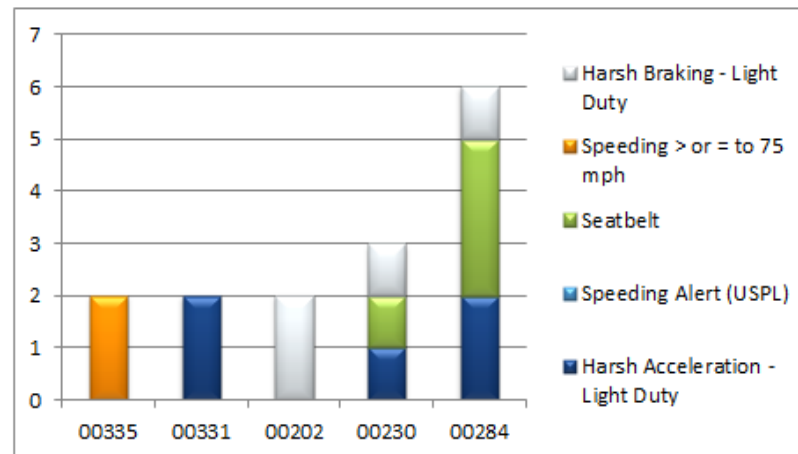
Safety Pillar - Reporting

- Can easily show based on the rules of your customers choice who are safe drivers and who are risky drivers.
- Driver scores can also be set up to be emailed to the users in a timely matter.
- Can also look at the positive. Who are safe drivers and offer an incentive program. This concept is becoming very popular.

Top 5 Risky Drivers



Top 5 Safe Drivers



Safety Pillar - Supporting

- First, understand your customers needs and set the rules accordingly.
- Simple, popular rules to work with.
- These rules can be set to be emailed in real time using the envelope on the far right if needed.
- Otherwise they automatically populate into the Exceptions report and the Risk Management report.
- You can also see broken rules on the map and in the Trips Detail report.

The screenshot displays the 'SAFETY' configuration page in the Geotab interface. It features a list of seven safety rules, each with an 'On/Off' toggle, a configuration slider, and a description. The 'Harsh Braking' rule is currently set to 'On' and 'Passenger Car'. The 'Speeding' rule has a 'SPEED OVER LIMIT' of 3 mph. The 'After Hours Usage' rule includes an 'Edit Work Hours' button. Each rule has a help icon (?) and an email icon (✉) on the right side.

SAFETY

- Harsh Braking** (On/Off): Passenger Car, Truck/Cube Van, Heavy Duty. 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 1/2 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. Loose objects on the seat would likely be thrown to the floor.
- Hard Acceleration** (On/Off): Passenger Car, Truck/Cube Van, Heavy Duty. 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 1/2 G would be exerted on the vehicle. The driver would be thrown back into their seat and the load could shift.
- Harsh Cornering** (On/Off): Passenger Car, Truck/Cube Van, Heavy Duty. When set to Passenger Car, the rule will trigger when a hard or aggressive turn causes a force greater than 1/2 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. Saved Successfully
- Speeding** (On/Off): SPEED OVER LIMIT: 3 mph. 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** (On/Off): This rule is triggered when the driver isn't wearing a seatbelt while the vehicle is moving faster than 10 km/h or 6.21 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** (On/Off): This rule is triggered when a vehicle is driven outside work hours. Different vehicles can have different work hours or work days. Edit Work Hours
- Possible Accident** (On/Off): 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.

Safety Pillar – Exceptions Detail

- Exceptions Detail report shows every rule broken and location.
- You can double click on any given line and it will take you to the map to show you where the rule was broken. Often used in driver discussions.

Device	Location	Start Time	Duration	Distance (miles)	Exception Info	Rule Details	All Vehicles	Divisions	Territory
SH 807 6ZV Va	Second Harvest: 1524 Lodestar Rd, North York, ON, M3J 3C1	18/06/2013 11:07:35 AM	<1m	0	Gear Position: 63.00	Backing Up When Leaving	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	118 Allen Rd, Toronto, ON, M3H	18/06/2013 11:11:47 AM	<1m	1	Max Speed: 58 miles (Max road speed: 50 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	HWY-401 Collectors, Toronto, ON, M2P	18/06/2013 11:16:32 AM	<1m	0	Max Speed: 68 miles (Max road speed: 62 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	Lesmill Rd & Duncan Mill Rd, North York, ON, M3B	18/06/2013 11:19:49 AM	<1m	0	Max Speed: 37 miles (Max road speed: 31 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	1370 Don Mills Rd, North York, ON, M3B 3N7	18/06/2013 11:23:25 AM	<1m	0	Max Speed: 42 miles (Max road speed: 37 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	926 Don Mills Rd, North York, ON, M3C	18/06/2013 11:37:23 AM	<1m	1	Max Speed: 47 miles (Max road speed: 37 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	751 Don Mills Rd, North York, ON, M3C 1S3	18/06/2013 11:40:57 AM	<1m	0	Max Speed: 42 miles (Max road speed: 37 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	592 Don Mills Rd, Toronto, ON, M3C	18/06/2013 11:42:36 AM	<1m	0	Max Speed: 45 miles (Max road speed: 37 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	Don Mills Rd, Toronto, ON, M3C	18/06/2013 11:43:04 AM	<1m	0	Max Speed: 41 miles (Max road speed: 37 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	Don Valley Pky, Toronto, ON, M4K	18/06/2013 11:44:27 AM	<1m	0	Max Speed: 60 miles (Max road speed: 56 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	Don Valley Pky, Toronto, ON, M4K	18/06/2013 11:45:06 AM	<1m	0	Max Speed: 60 miles (Max road speed: 56 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	Bayview Ave, Toronto, ON, M4K	18/06/2013 11:47:10 AM	<1m	0	Max Speed: 42 miles (Max road speed: 37 miles)	Speeding	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	12 Sheppard St, Toronto, ON, M5H	18/06/2013 12:45:42 PM	5m	0		Idling	All Vehicles	Second Harvest	West Regi
SH 807 6ZV Van	1428-Scott Mission: 280 College St, Toronto, ON, M5T 1R9	18/06/2013 1:15:36 PM	<1m	0	Gear Position: 63.00	Backing Up When Leaving	All Vehicles	Second Harvest	West Regi

Safety Pillar – Exceptions Summary

- Exceptions Summary is a simple total count of how many rules have been broken for the time frame and vehicle set chosen.
- Often used for simple dashboards and/or reports for those that just want to know who broke the most rules and/or who broke the least amount of rules.
- Used when not interested in looking at broken rules by mile driven.

Device	Exception Rule	First Incident	Last Incident	Duration	Distance (miles)	Incident Count	All Vehicles	Divisions	Territory
SH 196 9XE R1									
SH 196 9XE R1	Speeding	18/06/2013 2:43:51 PM	18/06/2013 2:43:51 PM	<1m <1m	0 0	1 0	All Vehicles	Second Harvest	South Region
SH 655 0TR R5									
SH 655 0TR R5	Speeding	18/06/2013 2:54:44 PM	18/06/2013 2:54:44 PM	<1m <1m	0 0	1 0	All Vehicles	Second Harvest	East Region
SH 670 7TR SP									
SH 670 7TR SP	Speeding	18/06/2013 11:07:43 AM	18/06/2013 12:12:14 PM	1m 1m	1 1	2 1	All Vehicles	Second Harvest	East Region
SH 807 6ZV Van R9									
SH 807 6ZV Van R9	Backing Up When Leaving	18/06/2013 11:07:35 AM	18/06/2013 1:15:36 PM	<1m	0	2	All Vehicles	Second Harvest	West Region
SH 807 6ZV Van R9	Speeding	18/06/2013 11:11:47 AM	18/06/2013 11:47:10 AM	3m 3m	3 3	11 3	All Vehicles	Second Harvest	West Region
SH AA56968 R8									
SH AA56968 R8	Speeding	18/06/2013 11:40:08 AM	18/06/2013 12:03:24 PM	1m	2	2	All Vehicles	Second Harvest	West Region
SH AA56968 R8	Harsh Cornering	18/06/2013 1:29:48 PM	18/06/2013 1:29:48 PM	1m	0	1	All Vehicles	Second Harvest	West Region
SH AD24848 R3									
SH AD24848 R3	Hard Acceleration	18/06/2013 8:26:17 AM	18/06/2013 11:29:44 AM	<1m	0	9	All Vehicles	Second Harvest , Second Harvest \Temp Sensor Vehicle Group	South Region
SH AD24848 R3	Speeding	18/06/2013 9:53:30 AM	18/06/2013 11:48:20 AM	2m 2m	1 1	6 1	All Vehicles	Second Harvest , Second Harvest \Temp Sensor Vehicle Group	South Region

Safety Pillar – Risk Management

- Fantastic all encompassing report, used for many custom template reports not only safety.
- It is the most commonly used report for most driver scorecards due to the fact that it has total distance driven.
- That gives you the ability to look at how many rules are broken by mile driven.
- Can view this report by driver or by branch/division, therefore, identifying areas/drivers that need driver training.

SH 807 6ZV Options ▾ Sort by Name ▾ Reports ▾

Risk Management Report

SH 807 6ZV Van R9				Show details
Distance	118mi	Idling time	16m 54s	
Speed over	62mi: 2	65mi: 3	68mi: 2	
ExceptionEvents	Backing Up When Leaving: 7 times for 2m 37s for 0.039mi Hard Acceleration: twice for 1s for 0.001mi Harsh Cornering: 7 times for 5s for 0.027mi Harsh Braking: twice for 0.002mi Speeding: 38 times for 22m 45s for 20mi			

SH 807 6ZV Options ▾ Sort by Name ▾ Reports ▾

Risk Management Report

SH 807 6ZV Van R9				Hide Details
Distance	118mi	Idling time	16m 54s	Idling over 5 mins: 0 Tamper signs: 0 After hours trips: 0
Speed over	62mi: 2	65mi: 3	68mi: 2	Average speed: 16mi
ExceptionEvents	Backing Up When Leaving: 7 times for 2m 37s for 0.039mi Hard Acceleration: twice for 1s for 0.001mi Harsh Cornering: 7 times for 5s for 0.027mi Harsh Braking: twice for 0.002mi Seatbelt: 0 time Speeding: 38 times for 22m 45s for 20mi			
Stops (counts)	Total: 36	< 10 m: 22	> 10 m: 5	> 20 m: 1 > 30 m: 0 > 40 m: 0 > 50 m: 8

Safety Pillar – Accident Data

- This is one rule that should be set up to notify someone in real time when an accident has occurred.
- Once an accident level event occurs we download 72 seconds of second by second data into MyGeotab to allow us to recreate the event.
- An accident level event is usually about a 2.5 G force level and higher.
- The accident data populates into both the View Accident & Log Data Report and the Status View in the Engine Report

