# Log Transport Safety Council Beauty or Beast ?



#### **HISTORY – Birth By Political Heat**

- Perceived crash rate for Log Trucks was 3 times the National Average according to the Heavy Vehicle Crash Survey.
- A high profile multiple fatality accident near Tauranga resulted in calls for immediate action by the Government represented by Land Transport Safety Authority.





- The Forest Owners Association, Road Transport Forum, Transport Engineers Logging Industry Research Organisation (LIRO), Log Trailers Manufacturers and selected Log Transport Operators were invited.
- Lawyers for the LTSA were present with the mandate to investigate removing log trailers from the public roads forthwith.
- There was much heated discussion however the Log Transport Safety Council as it is known today was formed.



#### **Immediate Steps Taken Were**

- A voluntary reduction in load height.
- Education by road show.
- Vehicle design and stability improvement investigation.



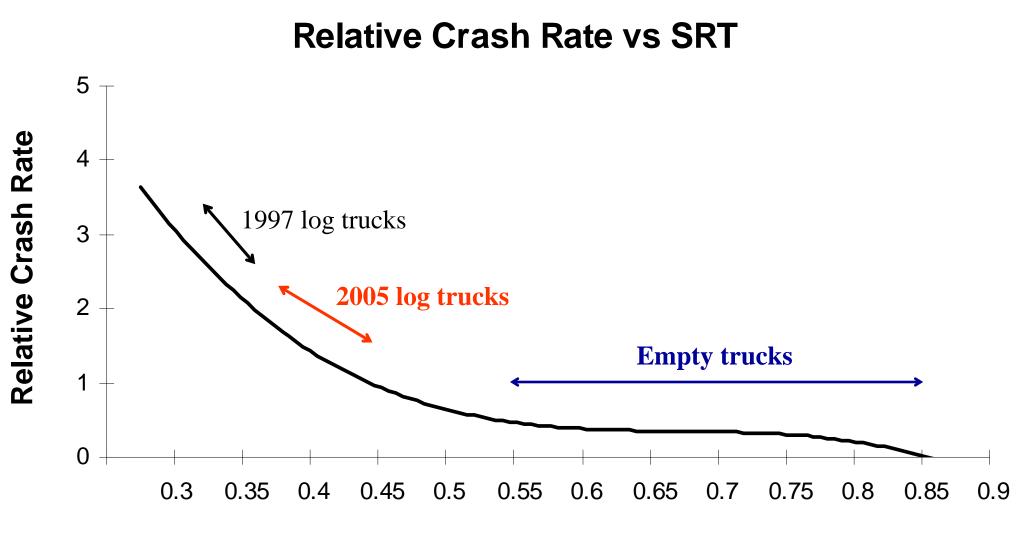
Voluntary Reduction In Load Height had to be Proven to Work

- Static Roll Threshold Calculator
- 20 Metres to 22 Metre Load Length.
- Effective and Operator Friendly.
- Government Approval.



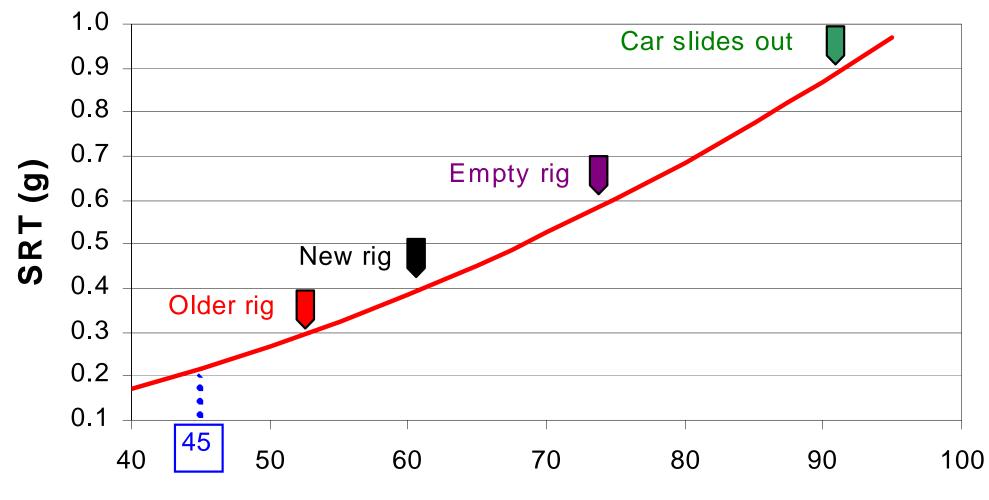


# SRT versus crash rates (SRT) New rigs have an SRT of typically 0.42g



Static Roll Threshold (g)

## 45 km/h advisory curve



Speed km/h

Assumes perfect curve tracking

#### **Driver Education**

- National Certificate Program.
- Codes of Practice.
- 0800 Data Collection.
- Load Securing.



Vehicle Design and Stability Improvement Investigation

- Loading to FOA Requirements.
- High horsepower Trucks and poor performing Trailers.
- LIRO recommended unit very poor performer.









• Belly chain only

Chain attached through trailer anchor (for piggy backing)
0.76 g Max deceleration

- 3.7m logs
- 1 bolster chain at rear and one belly chain (2 tie downs)
- No movement



- 1 webbing belly and one bolster chain at rear (2 tie downs)
- 0.73g max deceleration
- Load moved about 800mm. Back packet hit front packet.



#### Deceleration of approx **0.5**g

Up to 1m of movement Logs protruding through cab guard

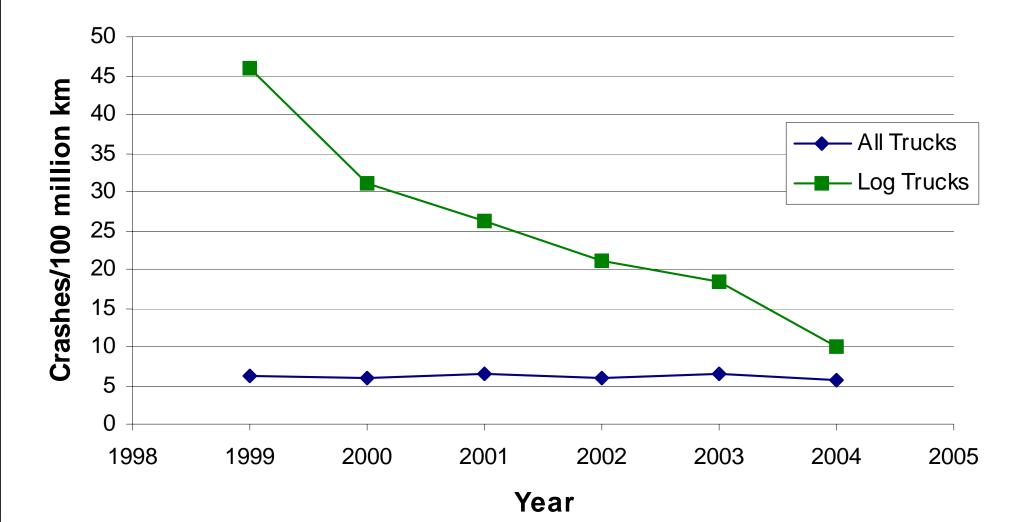
2 x 75mm straps on all

three packets

GE & DA KENNEDI TRAILERS KENNEDI BARNEDALE



# **Over last 6 years over 75% reduction in log truck rollover and loss of control crash rate**



### Conclusions

- A largely regulatory and enforcement approach to safety does not produce the desired results
- Industry ownership of the issues is required with government assisting in a partnership role
- The Log Transport Safety Council has worked well as an industry led initiative supported by Government
- Other agencies such as OSH and ACC are now joining LTSC as they can see the partnership works
- Receiving of two Road Safety awards is validation of LTSC success over the last 9 years.



### **Summary**

- Does the Log Safety Council work for all operators YES.
- The Log Transport Safety Council has grown into a respected organisation adding depth to the Forest Transport Industry. The model is proven and should be used by Transport Sectors in need.
- So Beauty or Beast ?

Started as a beast, developed into a beauty.

