JOINT AGENCY INTELLIGENCE PROJECT TRANSPORT SAFETY IN THE FORESTRY SECTOR









PROJECT AIM

- Set up a collaborative cross agency working group
- To assess the safety of transport in the New

Zealand forestry industry



ASSESS	IDENTIFY	ANALYZE
 the size of industry and 	 grey areas in legislation 	 potential impacts across the
future expansion	 what drives transport decisions 	transport system
 impact of expansion 	 highest risk points in the 	 options for mitigating risks
 drivers and mechanisms of 	process (including analysing	

crash and incident data)

harm



Of forestry owners own small (<499ha) holdings

FORESTRY ORIGINS

- Privatisation and 90's
 - planting boom
- 65,000ha planted p/a
- 28 years average harvest

age of pinus radiata

Volume (000m3) Exported per Year



EXPORT GROWTH

- Export volume trebled from 2007-2017
- Currently 66% of volume
 - exported as raw logs/poles

Volume (000m3) Maturing per Year



THE WALL OF WOOD

- Volume of available wood at maturity to double in 5-10 years
- Small scale blocks, independently owned
- Demand anticipated to remain stable/increase

PROCESS MAP – LOG TRANSPORT



7

Logs to

Ports

3

Ports to

Ships

HARVESTING -Contracting logging company workers fell trees with chainsaws and machines





by contracted trucking companies.

PORT STORAGE - Logs are stacked and stored at port; in some cases they may be sprayed and fumigated by contracted fumigation service providers.



BREAKING OUT - Felled trees are retrieved by 'breaker outers'. Done by chains attached to vehicles, cranes or by helicopters.



DE-LIMBING - The felled trees once limbed by the logging company.



TRANSPORT - Trucks transport logs from logging sites directly to ports or to rail yards where they are loaded onto freight trains and freighted to ports.



SHIP LOADING - Logs are loaded onto ships by stevedores.



broken out, are de-



STACKING - The

logging roads.

prepared logs are then

stacked and graded at

loading points along

UNLOADING - Logs are unloaded from trucks or trains at ports by employees of the port.



SHIPPING - Logs are shipped off shore by international shipping companies. The majority of NZ's log exports go to China.

Regional Area of Pine Maturing next Ten Years (ha)



THE WALL OF WOOD

- Volume of available wood at maturity to double in 5-10 years
- 2022: forecast 55% available pine in small forests.
- Demand anticipated to remain stable/increase



- 0 2,000,000 4,000,000 6,000,000 8,000,000 PORT ACTIVITY
- Tauranga accounts for 31% total logs and poles exported in 2017
- The top three ports accounted for 60% of total volume exported in 2017.
- Tauranga accor

Auckland

- numbers have increased
- simultaneously with wood

Registered logging truck

٠

supply & harvesting activity

Registered Logging Trucks per Year



ROAD TRANSPORT FLEET

LOGGING TRANSPORT HARM

• ACC claims data on workplace accidents

and injuries

NZTA road accident data ٠

TRANSPORT WORKERS

NEW ZEALAND PUBLIC

- injuries to truck loaders and ٠
 - drivers securing logs
- injuries to port workers and ٠ stevedores loading logs

247 crashes involving logging

From 2016 – 2017 there were

trucks

•

- 9 were fatal
- 19 involved serious injuries •



ANALYSIS

road transport

- some areas more adversely
 - affected than others





DRIVERS OF THE HARM

• ACC claims data on workplace accidents

and injuries

• NZTA road accident data

TRANSPORT WORKERS

• structure of the industry

places pressure on

contractors

• skills shortages in the sector

creates further pressure

NEW ZEALAND PUBLIC

driver behaviour around heavy

trucks

- unfamiliarity with heavy trucks working newly-harvested areas
- road design and quality of some

ANALYSIS

• potential for increase in trucks

on the roads

- increasing activity in new areas
- risk mitigations can include tech

solutions and transport hubs

roads

AVIATION IMPACTS – HELICOPTER SECTOR

any increase activity in the forestry sector is ٠

likely to have a considerable impact on the

helicopter sector

ROLE OF HELICOPTERS

- forest survey ٠
- crew and equipment ٠

transfer

forest spray/treatment ٠

SAFETY RECORD

- several heli logging accidents in the early 2000s
- accidents and incidents on
 - other forestry work



FUTURE IMPACTS

likely increase in heli logging -

only option for some forest

owners

increase in spray and supply

work

COLLABORATION – WHAT WE LEARNED

• Collaborative working group a success

overall, with challenges along the way



- analysis of ACC claims data
 - can be challenging
- under reporting of incidents

in some sectors



- new analysis techniques
- new data
- original and varied perspectives
 - on different issues





• the collaborative approach

works

- we are connected
- we share common issues