#### GOVERNMENT INITIATIVES

## Regulators Perspective Reducing Road Trauma

IRTENZ 2004

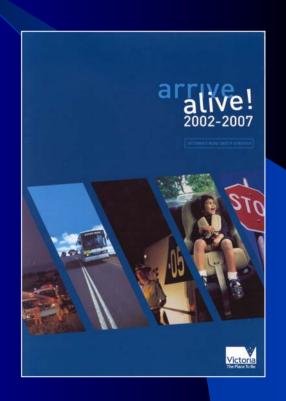
Ross Mc Arthur
Manager - Vehicle Safety
VicRoads





# arrive alive! Victoria's Road Safety Strategy 2002-2007

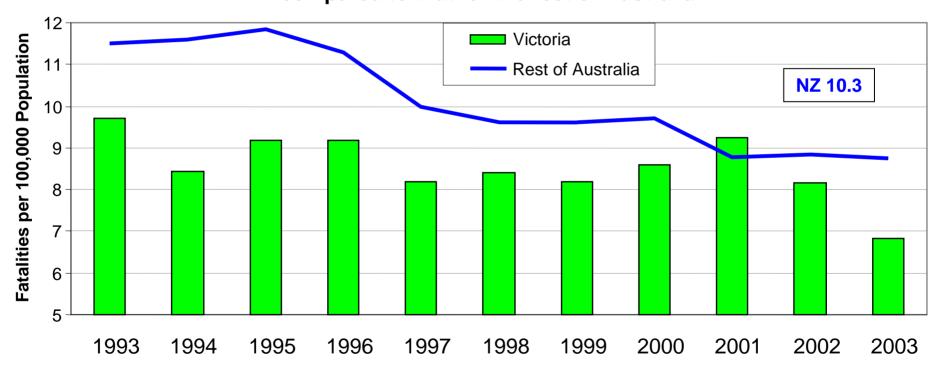
- A five year plan to improve road safety
- Target of a 20% reduction in death and serious injury by 2007
- National target 40% reduction over 10 years





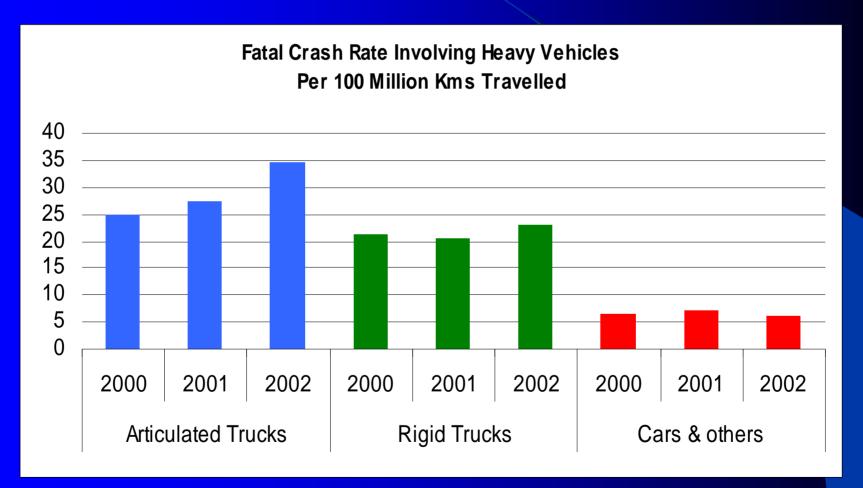
### Victoria's Road Toll

### Fatalities per 100,000 Population compared to that for the rest of Australia





## **Heavy Vehicle Crash Rates**





# Heavy Vehicle Crash Involvement

#### Between 1998-2002:

- 5.3% of crashes involving a heavy truck were fatal crashes (country 9.6%, metro 3.5%)
- 1.8% of crashes not including a heavy vehicle were fatal crashes
- The involvement of a heavy vehicle increases the risk of a fatal crash by 2.9 times



# DELIVERING SAFER TRANSPORT



### CHALLENGES

Growth in the freight task (>70% Urban by 2020. Auslink)

**Deliver Safety with Mobility** 

Mass Incompatibility



# FUTURE New Safe System Approach

- Based on the premise that accidents are going to happen (even with focus on prevention)
- Someone should not loose their life because they make a simple mistake
- System designed to limit external forces so that so collisions do not result in death /serious injuries
- Individuals responsible for abiding by rules



# Avoiding Crashes Reducing energy

- **Road infra-structure**
- **Improving Compliance with law**
- Set appropriate Speed limits
- Vehicle Maintenance and Safety Standards,
- Safe System is about Balancing these factors



## INFRASTRUCTURE



# Countermeasures for Head on Crashes.

Road duplication
Tactile centre lining
Improved curve
delineation
Shoulder sealing
Potential Measures

Narrow medians





# Countermeasures for Run-off-Road Crashes

Wire Rope Barriers





## COMPLIANCE



## Compliance Focus

- Speed compliance
- Driver impairment
- Seat Belt wearing
- Performance Based Standards (PBS)
- Improved Vehicle Maintenance



## Legislation

- OH&S Vehicle is work place
- National Driving Hours
- National Chain of Responsibility Yet to have an effect
- Heavy Vehicle Safety Act
  - Power Collect records
  - Power to read computers
- Random Drug Testing
- 3 Strikes Ineffective to date





## SPEED

?





## Speeding Vs Risk

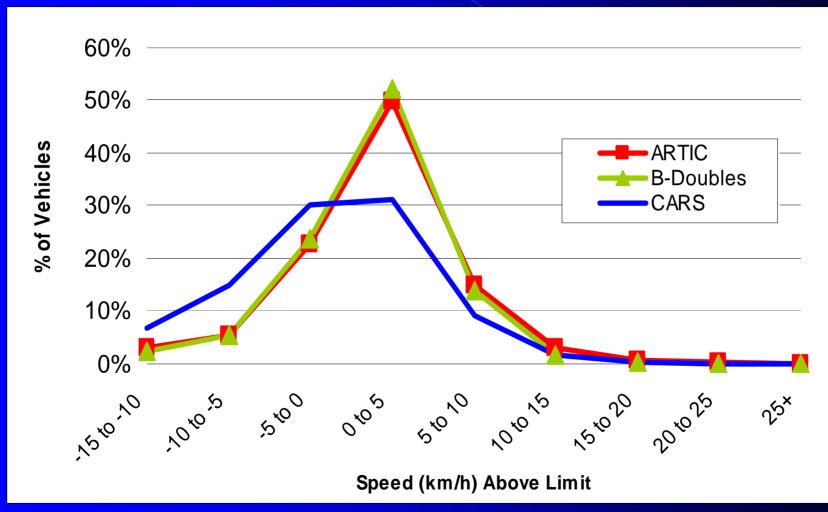
Austroads Class 9 vehicles exceeding posted speed limits (100 & 110 km/h roads)

Amount	<10	10-	15-	20-	25-	30-	35-	40-	45-	>50
over limit	%	15%	20%	25%	30%	35%	40%	45%	<b>50%</b>	%
Indicative relative risk	1.5	2.8	4.5	8	13	24	47	94	198	432

**ATSB** 



## Speed Distribution by Vehicle Type Hume Freeway





### DRIVER IMPAIRMENT



### Measures

- Information on health
  - Health Break
  - Guide to OH&S Programs

Web based Sleep Disorder Screening Program

Targeted Saliva Testing for Drugs



## Targeted Saliva Testing

In 2002, 27% of all drivers killed tested positive to drugs other than alcohol

Drivers who have recently used cannabis are at the same risk of having a road crash as having a BAC of 0.15.

Heavy vehicle drivers who test positive to stimulants (amphetamines) are at the same risk as a person with a BAC of 0.10 to 0.15.



## **Implementation**

Victoria Police are preparing for the commencement of roadside screening later in 2004.



#### **Seat Belts**

NSW Crash study between 1995 and 1998. 200 drivers of prime movers with trailers

For those who were not wearing a seat belt, 45% were killed or injured.

Of those wearing a seat belt none were killed or seriously injured, and 30% had minor injuries.



# PERFORMANCE-BASED STANDARDS

Content based on a similar presentation prepared by the NRTC for the ATC



# Why Develop Performance Standards?

- freight task increase significantly
- Reduced Transport costs
- Better utilization of infrastructure
- Allows for introduction of leading edge technology
- Better compliance/ safety



### Fit on Roads

PBS vehicles will need to show they can fit in the available road space and are stable



- making low speed turns,
- stopping
- starting
- travelling at high speed within a lane



### MAINTENANCE



## Goose-neck





## Poor Repair





### MAINTENANCE SYSTEM

Victoria Mandatory Periodic Inspection not supported

Promotion of regular routine maintenance

National Maintenance Accreditation Scheme

Supported by Random Inspections



## VEHICLE STANDARDS

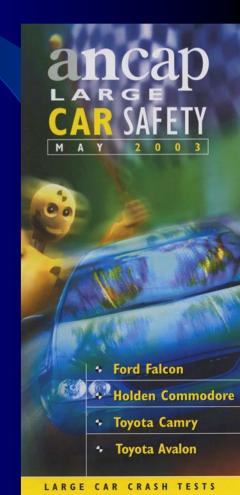


## Marketing Safer Vehicles

- Build consumer awareness and demand for safety features
  - Fleet managers and operators

Doing it with cars – ANCAP

Looking to do it with heavy vehicles



## Key Focuses

- Under Run Protection
- ABS/Traction Control
- **ITS** 
  - Lane keeping
  - ISA
  - Object detection
  - Black Box recorders



### SAFETY IS A TEAM GAME?

 Requires Governments and industry to work together

To deliver safety with mobility

