

# bp

## Safety and Fuel Saving from HVPA program



# Introduction to Road Happiness



# The BP Journey to Road Happiness



- Beginning
- Road Happy
- Conclusion and Future





# Beginning



# Beginning



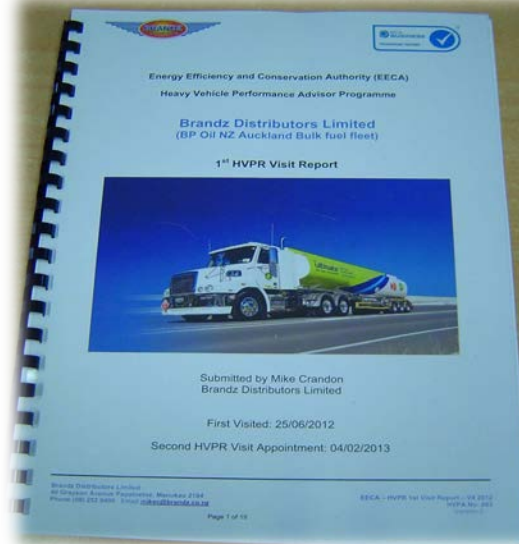
- Even though BP Oil is a major oil company in New Zealand, saving fuel is not one of the things that comes to mind initially.
- BP Oil Logistics owns its own tanker fleet consisting of 32 trucks and 42 trailers travelling over 5.5 million kms and completing over 34,000 trips p.a.
- For BP Oil Logistics to retain the right to operate we need to be a safe, reliable and cost efficient operation.



# Beginning



- BP Oil NZ Ltd supported the first EECA sponsored HVPA Pilot scheme in June 2012 and identified merits in safety, efficiency and compliance.
- A first visit HVPA report was completed late June 2012 by Mike Crandon (HVPA Brandz Distributors) which identified key fuel saving initiatives which began our fuel saving journey.







# Road Happy

A. 7 Point Action Plan

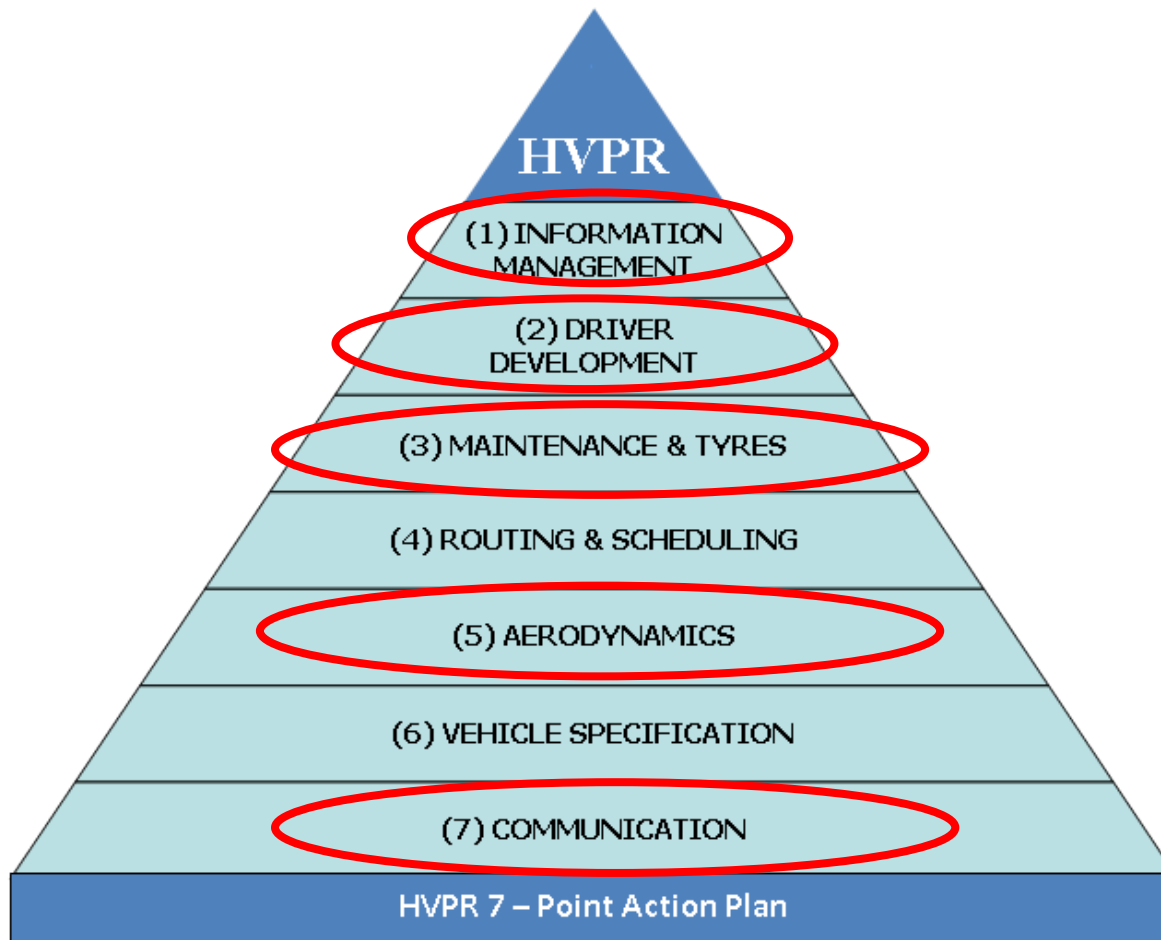
B. Fleet Management Action Plan



# Road Happy - 7 Point Action Plan

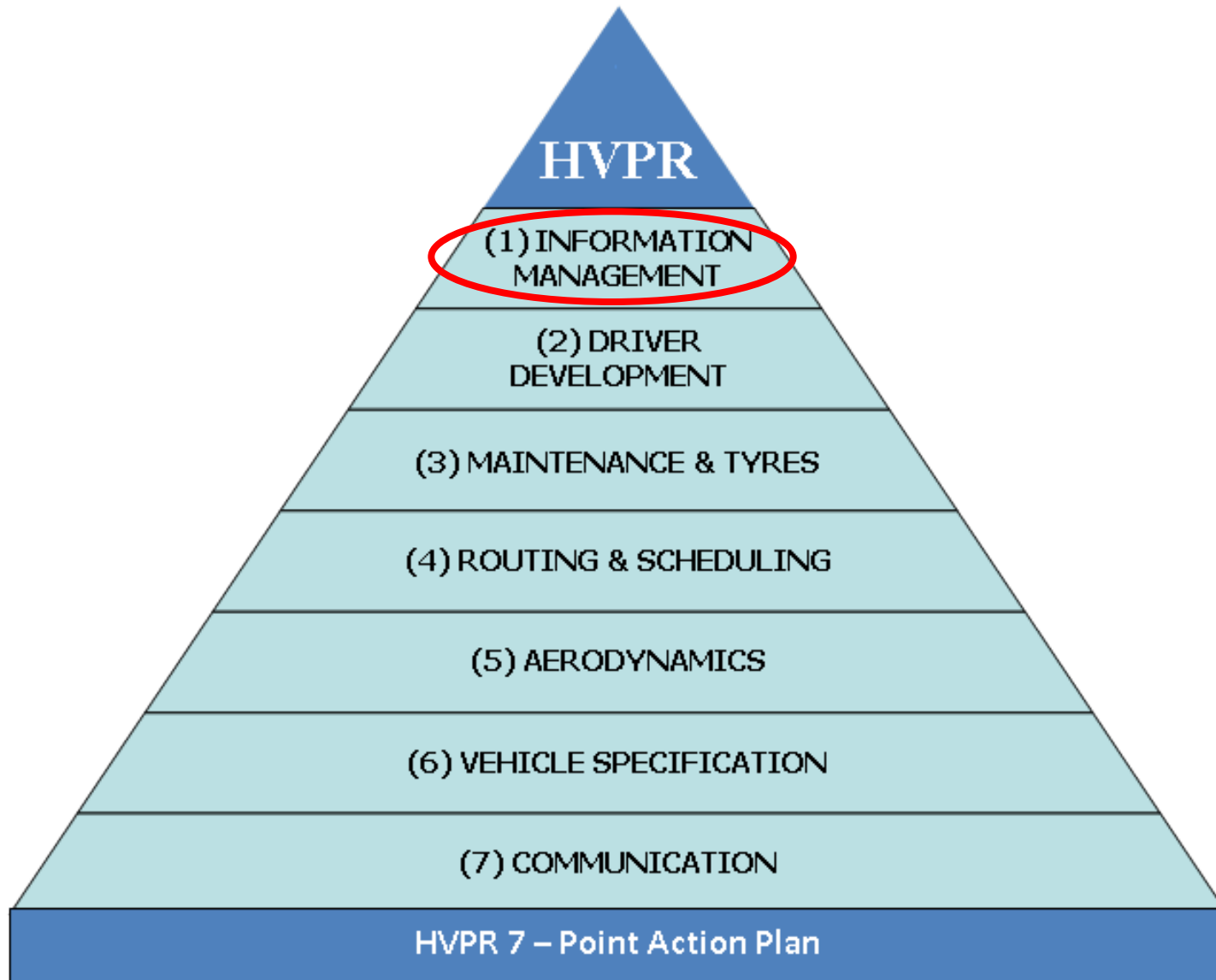


- Seven key elements identified from the HVPA assessment.





# 1. Information Management



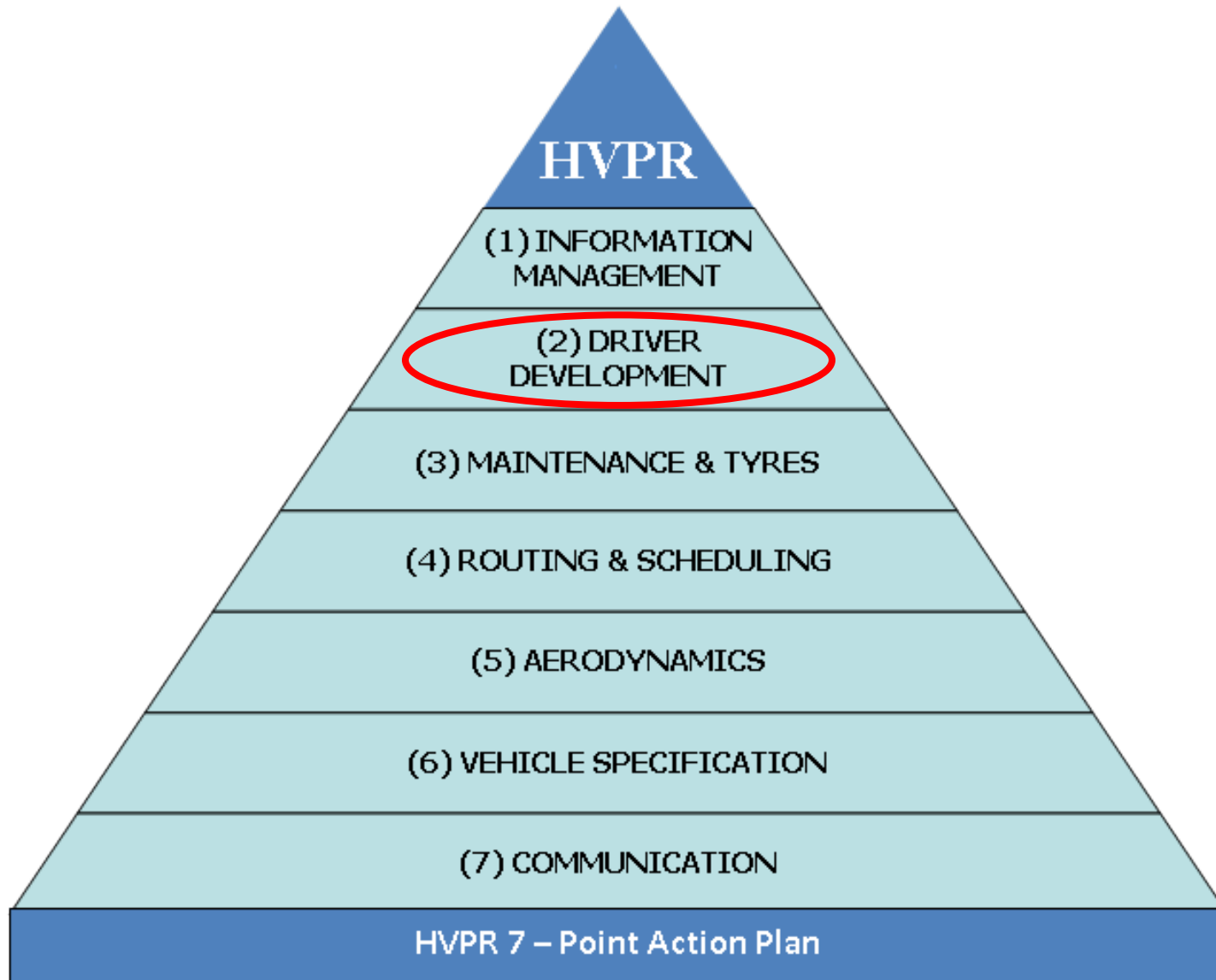
# Information Management



- Manage what you can measure
- Work with partners e.g. fuel supplier/eRoad/TR OSS.
- Use clean data to produce “before” picture.
- Set benchmark figures e.g. 5% and 10%.....
- Split fleet into truck type/location.
- Record any fleet location changes or change of duty.
- Engage technology e.g. ERoad, electronic fuelcard data, GPS.
- Monthly review meetings.



## 2. Driver Development



## 2. Driver Development



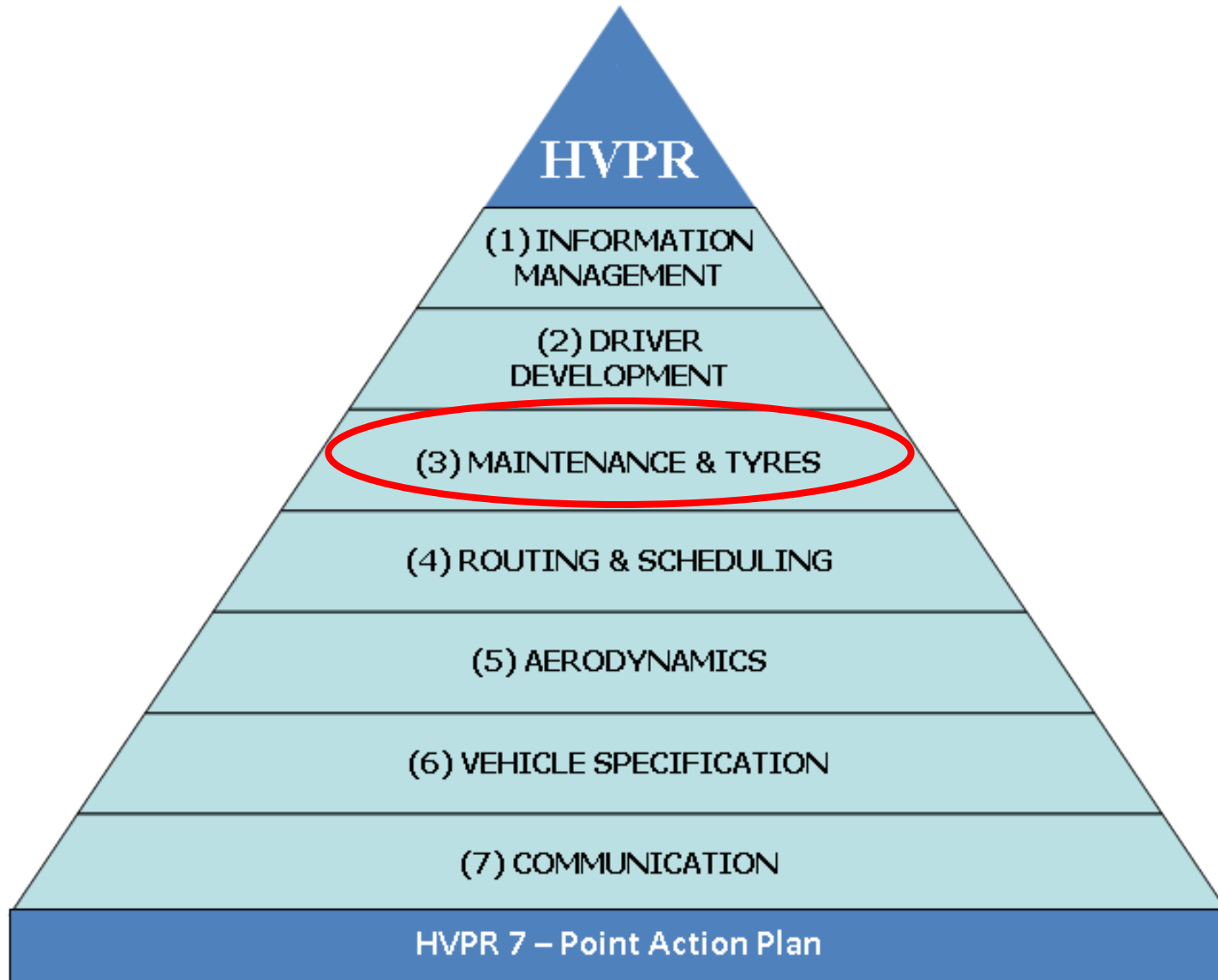
- SAFED drive 1 over a selected route of 27 Km.
- Feedback to driver using actual truck CANBUS data.
- SAFED drive 2 over the same route and compare results.
- Present a report to driver showing improvements in fuel economy, braking, gear changes and idling events.....

<i>Drive Details</i>	<i>Drive 1</i>	<i>Drive 2</i>	<i>Difference/percentage</i>
Duration	41 minutes	44 minutes	3 minutes
Number of gear changes	188	96	-48.94%
Fuel used	17 litres	15 litres	-11.76%
Brake Distance	4.01km	1.31km	-2.7km
Brake application count	63	35	28

# Typical Example



# 3. Maintenance & Tyres



# 3. Maintenance and Tyres



- Decide whether you manage your own maintenance or select contract maintenance.
- Audit service agents.
- Have agreed labour rates and parts discounts.
- Get estimates for repairs and issue order # before work commences.
- A current fleet tyre policy.
- Regular fleet inspections: tread depth/pressure/repairs
- Spot tyre checks on fleet.



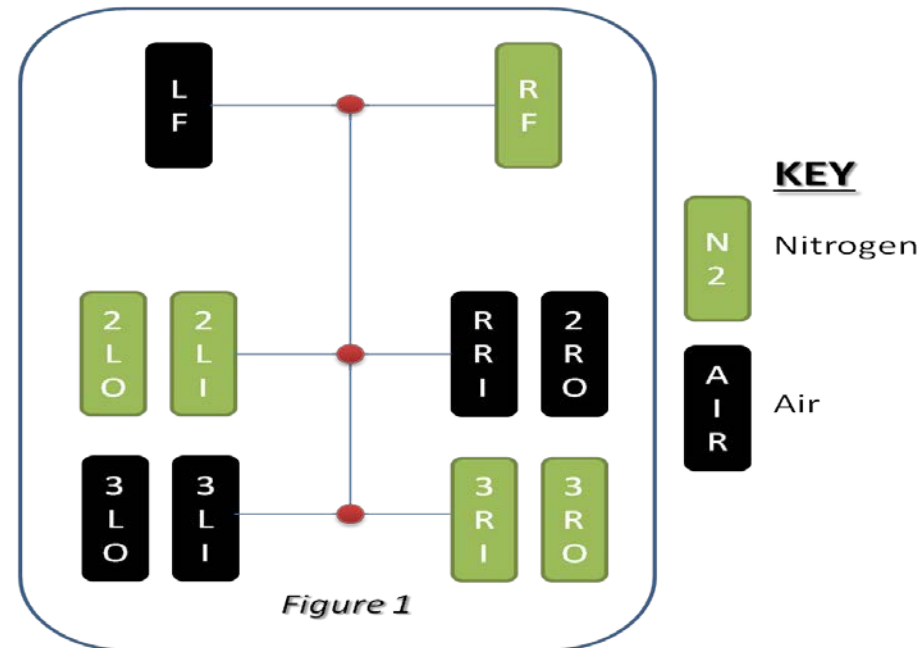


# Nitrogen Trial, started Feb 2013

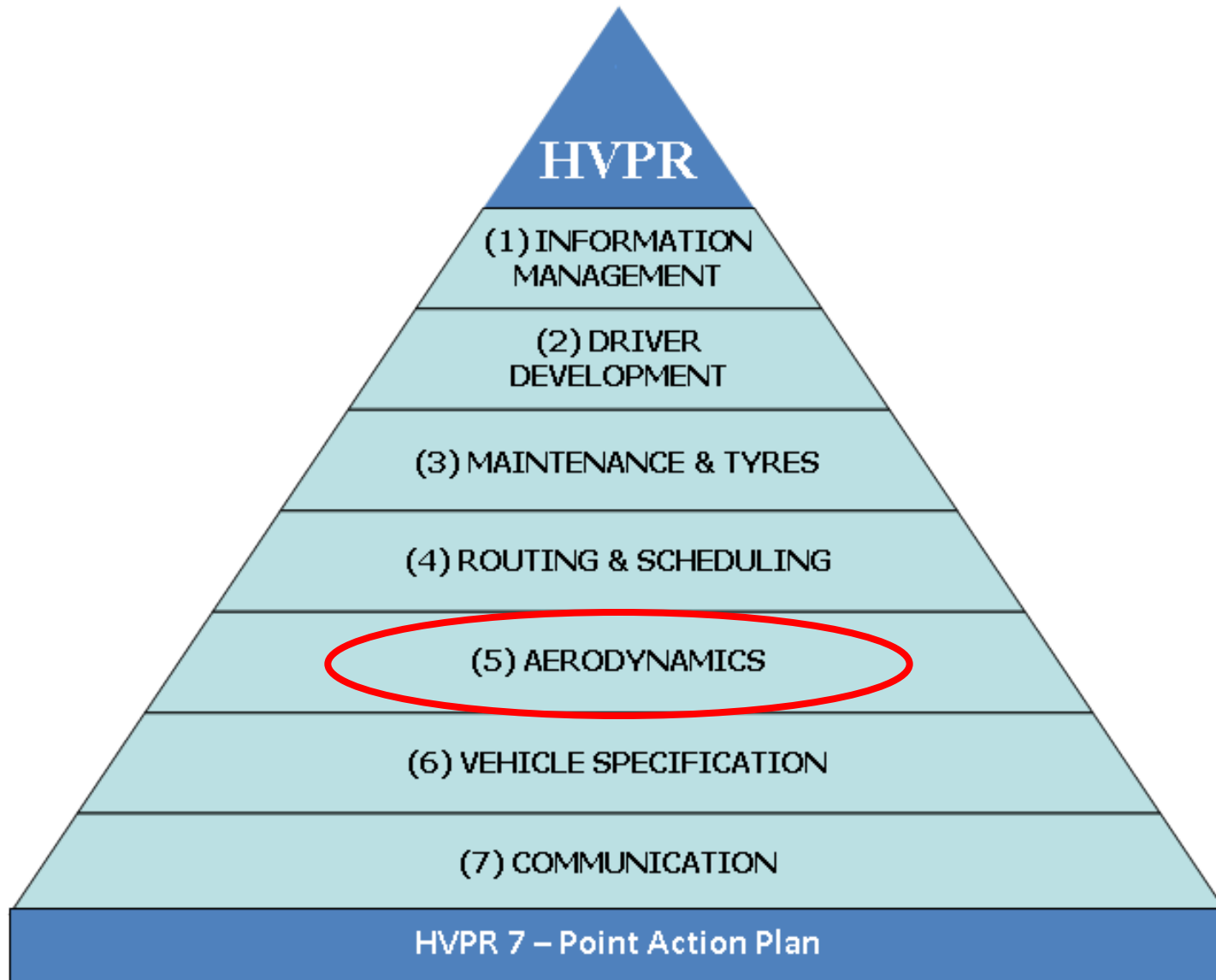


Gas	Run Out MM	KM/MM	Proj. KM
Air	5.45	8919	148057
Nitrogen	5.11	9508	157831

33 CPK Air  
30 CPK Nitrogen



# 5. Aerodynamics



# 5. Aerodynamics



Cab Gap

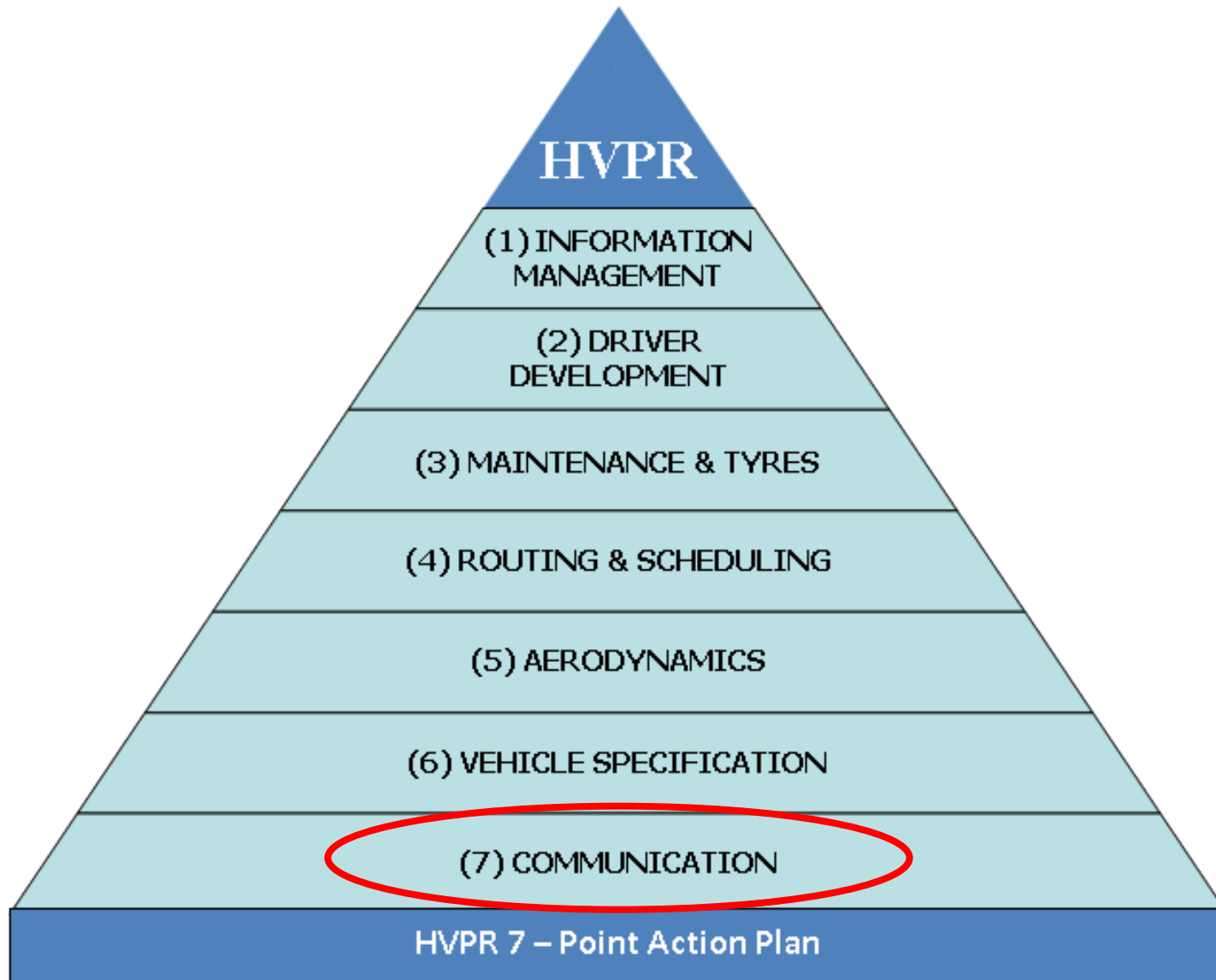
Dead Bug Line



Working with BVT Engineering  
Consultants CHCH



# 7. Communication



# 7. Communication



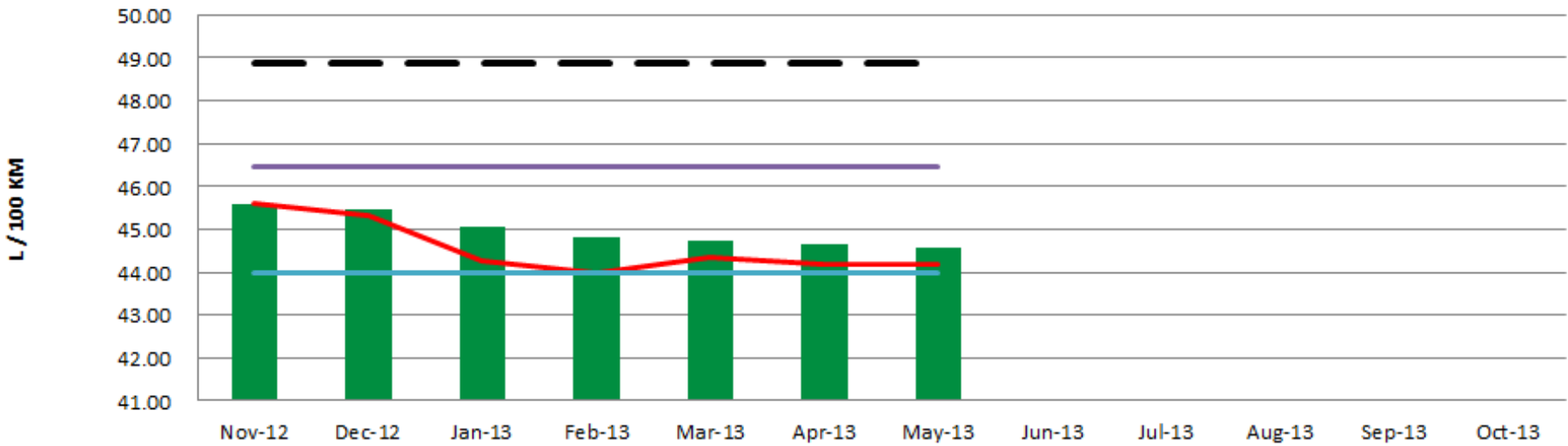
- Display results monthly on driver league tables.
- E Road can give over speed events.
- Get driver “buy in”. The “Adam” effect.
- Monthly driver incentive programme.
- Training truck fitted with Navman unit or similar for immediate driver feedback.
- Clearly show good/poor trends, as follows.....





Benchmark : 48.89l/100 km (March/April/May 2012)  
 Target 5% : 46.45l/100 km SAFED June – October 2012  
 Target 10% : 44.00l/100 km

### Brandz 6X4 Fleet



	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13
Cum 6X4	45.60	45.45	45.06	44.83	44.73	44.65	44.59					
Monthly 6X4	45.60	45.31	44.25	43.97	44.35	44.21	44.17					
Benchmark	48.89	48.89	48.89	48.89	48.89	48.89	48.89					
Target 5%	46.45	46.45	46.45	46.45	46.45	46.45	46.45					
Target 10%	44.00	44.00	44.00	44.00	44.00	44.00	44.00					



## 7. CO2 Emission reduction



YTD from 1st June, 2012 CO2

**Reduction 233.86 tons**

May CO2 Reduction : 23.19 tons





# 7. Projected Savings



	FUEL SAVINGS								PROJECTED	
	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	To Date	Remaining	12 Month
Brandz Distributors	6,594	7,270	8,940	8,516	9,458	8,629	7,211	56,618	36,054	92,672
Capital Fuels Fleet	1,119	3,529	849	1,717	2,007	967	936	11,124	4,680	15,805
Plains Transport Fleet	-676	-249	565	138	585	-413	-226	-275	-1,131	-1,406
<b>TOTAL</b>	<b>7,038</b>	<b>10,550</b>	<b>10,354</b>	<b>10,371</b>	<b>12,050</b>	<b>9,184</b>	<b>7,921</b>	<b>67,468</b>	<b>39,603</b>	<b>107,071</b>



**\$107 071**

# 7. Driver Recognition



# 7. Other Benefits from HVPR



- 75% reduction in Drive Cam events
- 70% reduction in eRoad over speed events.
- Improvement in speed compliance and safety.
- Cost saving of \$120K in 12 months on track.
- Reduction in CO2 emissions (232 tonnes - 7 months).
- Good data allows sound decisions to be made.
- Nitrogen tyre inflation trial.
- Share results with customers and “add value” to relationships.
- Monitoring of company car fleet (GPS via Smartrak).





# Conclusion and Future



# Conclusion

- We began the journey 12 months ago looking at reduction in fuel usage. HVPA has identified other benefits worth chasing.
- HVPA is simply a tool box of initiatives. You select how many you want to use.
- Try one initiative at a time.
- Team approach works best.
- Closely monitor results.
- Develop a fleet management action plan



# Future



- SAFED Refresher driver training after 6 months.
- Fuel data from CANBUS for each driver.
- Changes to incentive program.
- Engine Mapping.
- Monthly report meetings become quarterly.
- Smartrak installed in company cars
- TR Group ASK driver training program.





# bp

Be Road Happy

