

Association
mondiale
de la Route



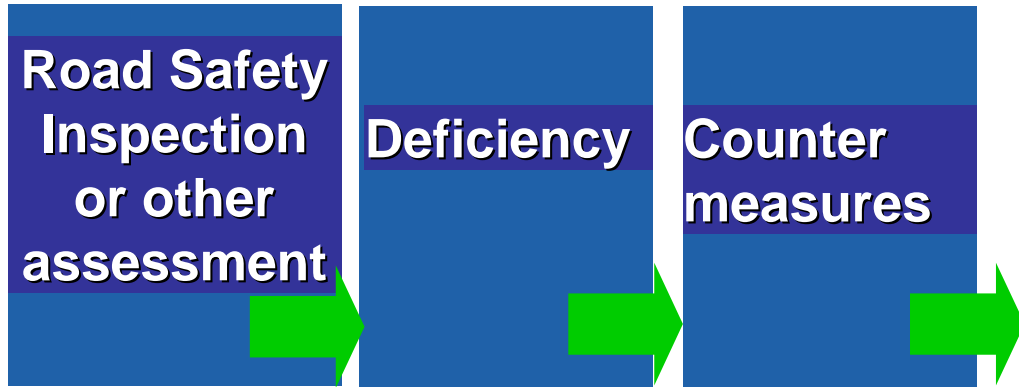
World Road
Association

Low Cost Countermeasures

Phil Allan
Australia

ROAD SAFETY SEMINAR
Lome, Togo
October 2006

Process



\$\$\$	Duplication
	Re-alignment
	Overtaking Lanes (2+1)
	Intersection re-alignment roundabout or turning lane
	Separate cycle path
	Shoulder Sealing
	Speed enforcement technology
	Hazard removal or protection
	Cycle lanes
	Traffic calming
	Pedestrian treatments
	Rumble Strips
	Audio tactile edge lining
	Rest areas
	Line marking
	Signage
\$	Lower speed limits

Road Surface

Deficiencies can include:

- Rutting
- Slippery Surfaces
- Edges with large fall off
- Poor or no shoulders

Road Surface



Road Surface



Roadside Hazards

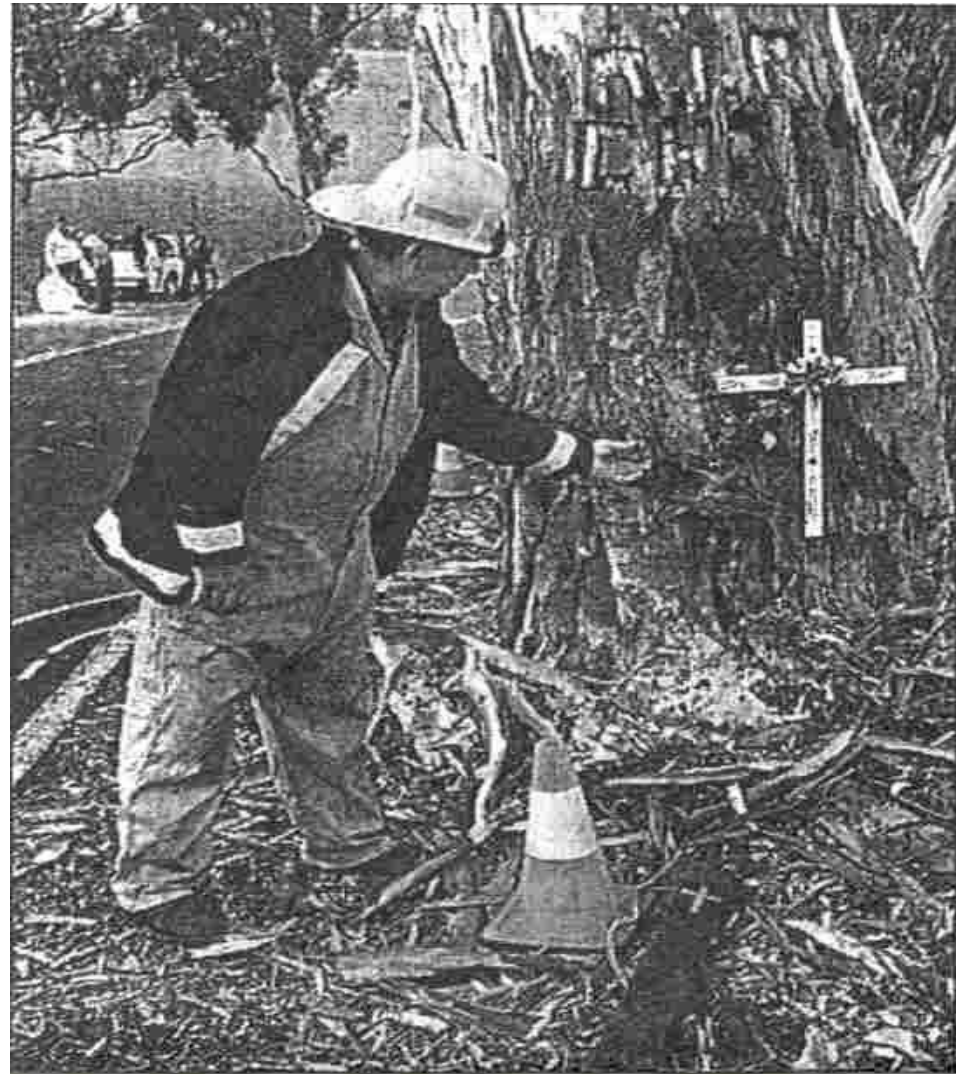
Hazards can include:

- Poles
- Trees
- Drains

Roadside Hazards



Roadside Hazards



Roadside Hazards



Roadside Hazards



Roadside Hazards



Examples include:

- Road design
- Poor signage
- Mixed traffic

Other Deficiencies

Poor signage – day/night



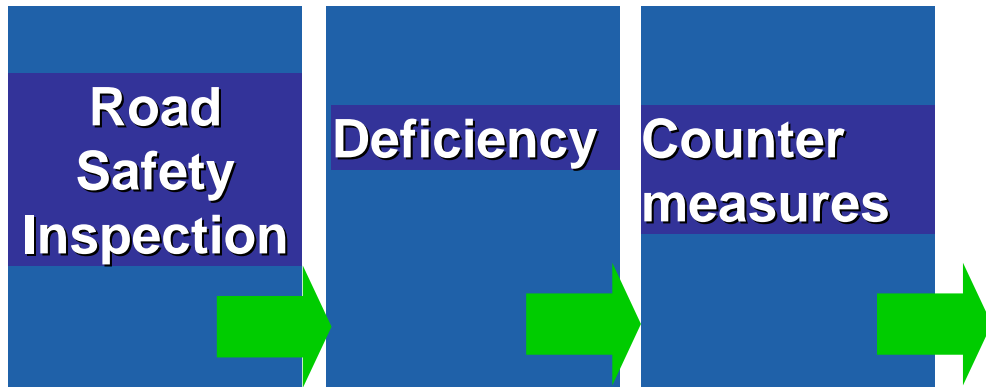
Other Deficiencies





Low Cost Countermeasures

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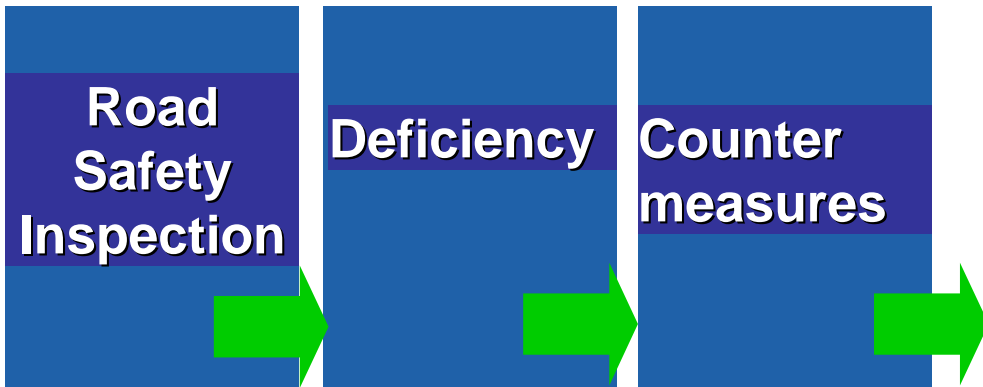
Overtaking Lanes



Overtaking Lanes



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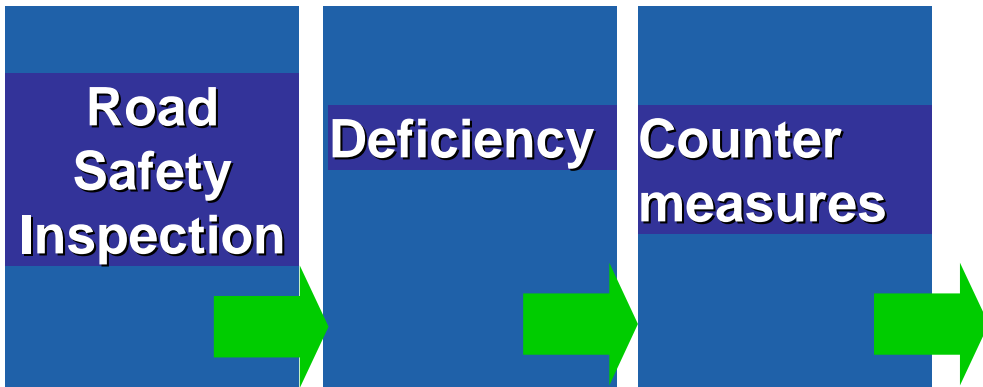
Roundabout



Turning Lane



Process

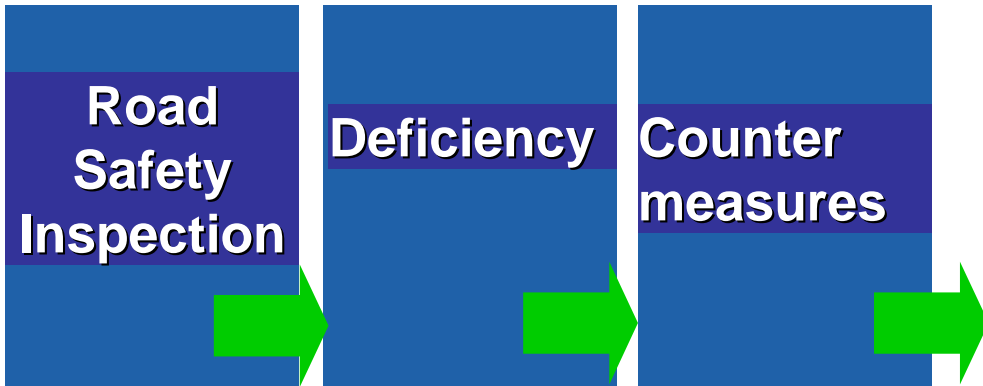


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Cycle path

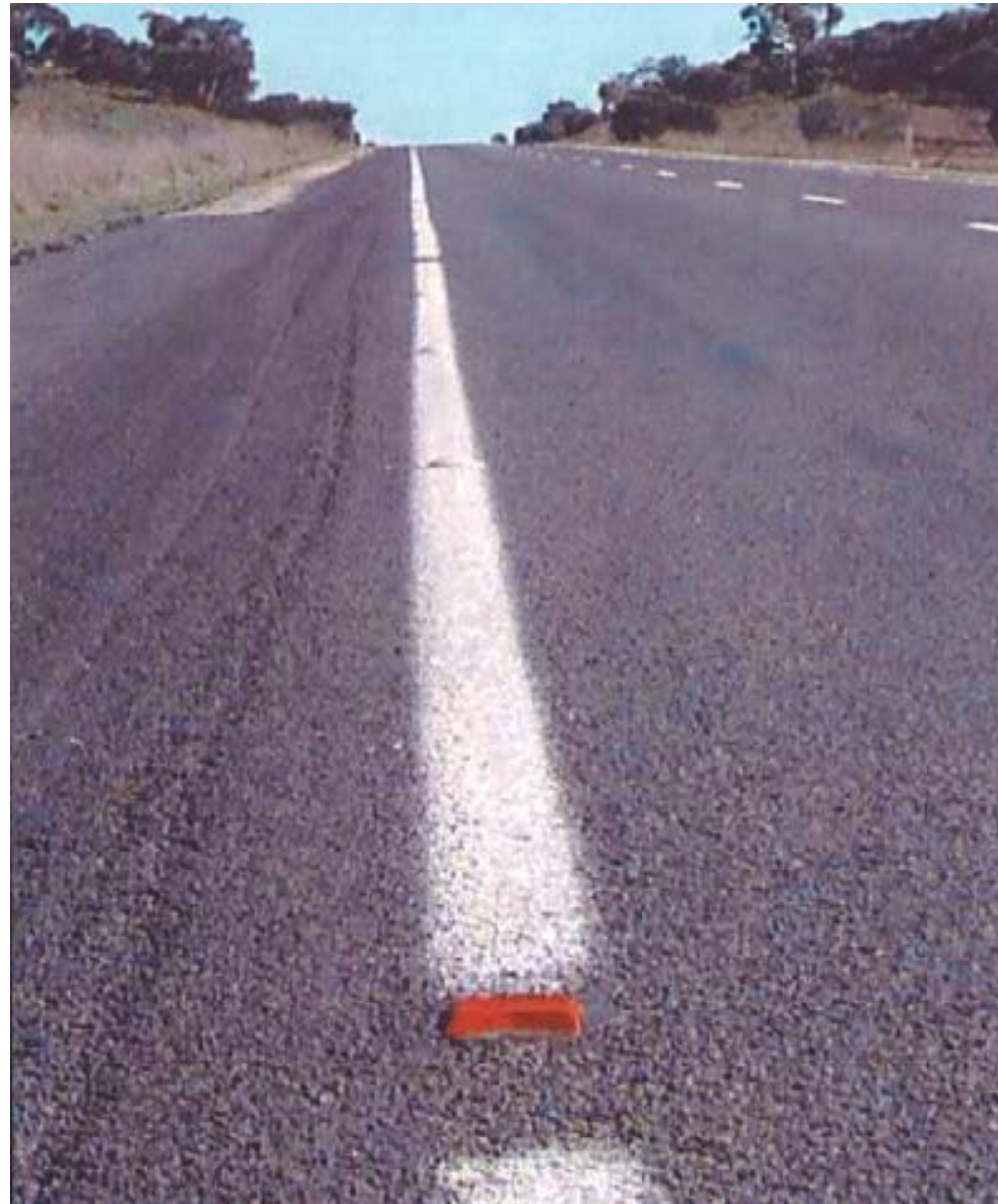


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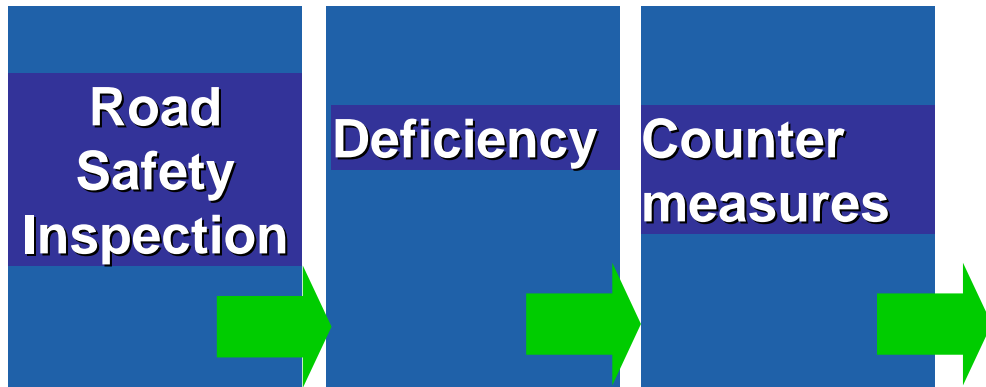
Shoulder sealing



Shoulder sealing



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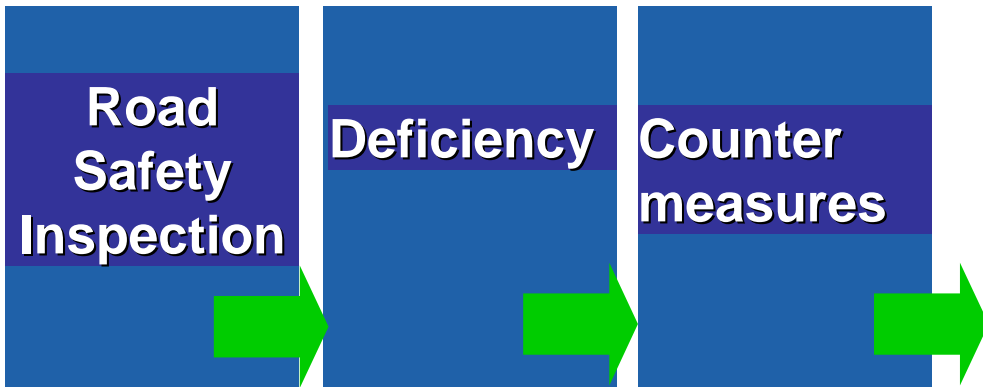


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Speed enforcement technology



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Hazard removal or protection



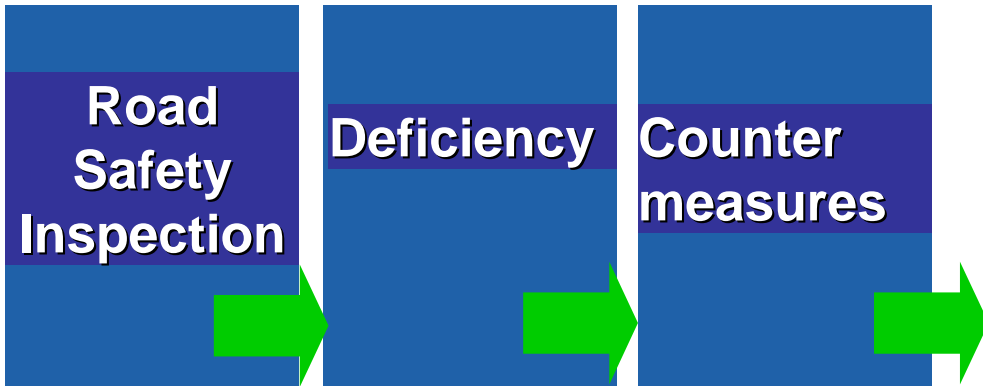
Hazard removal or protection



Hazard removal or protection



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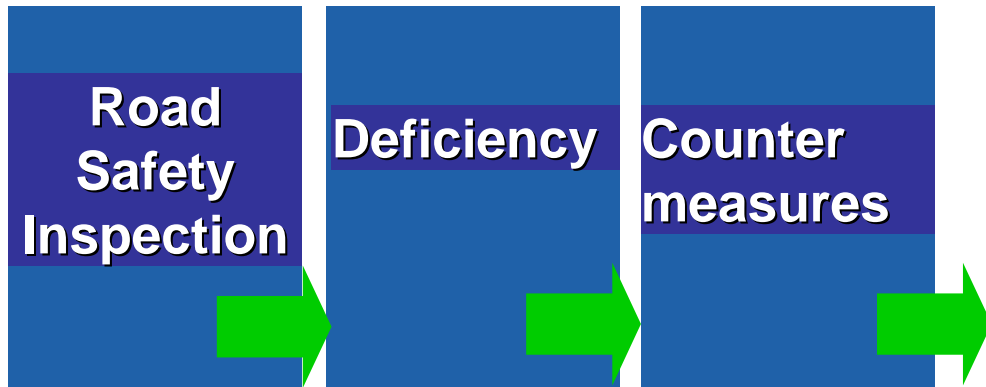
Cycle Lane



Cycle Lane



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Traffic Calming



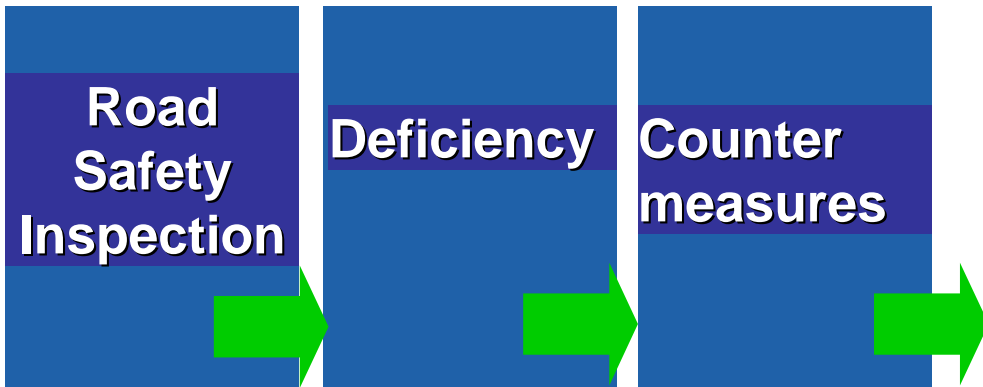
Traffic Calming



Traffic Calming



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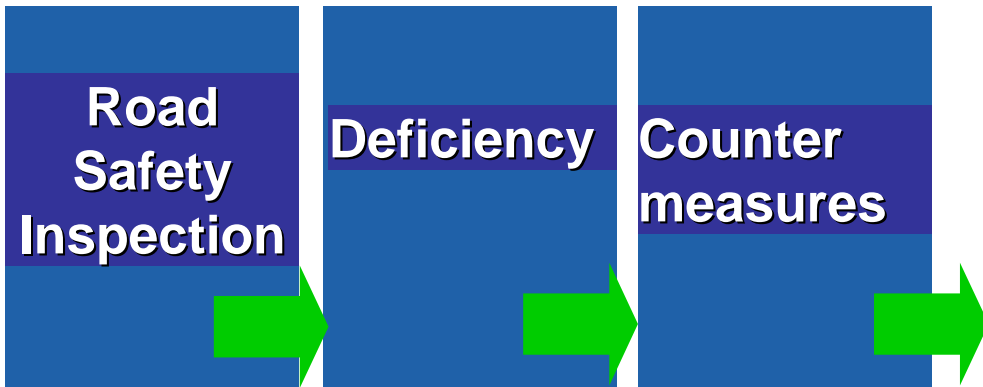
Pedestrian treatments



Pedestrian treatments



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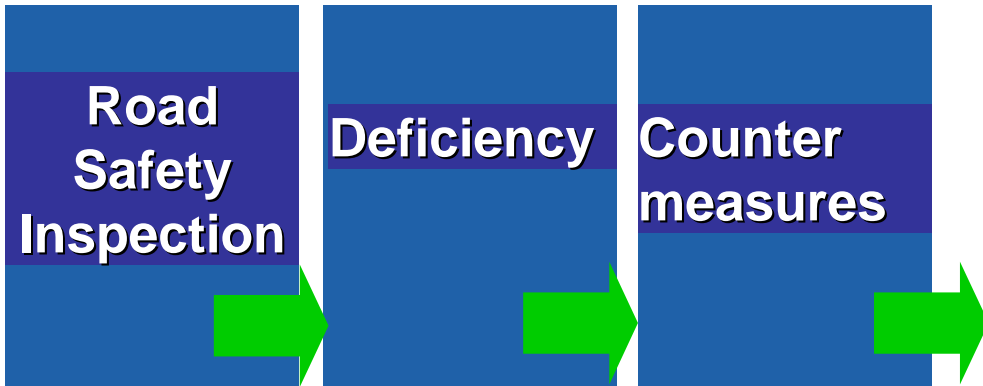


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Rumble Strips



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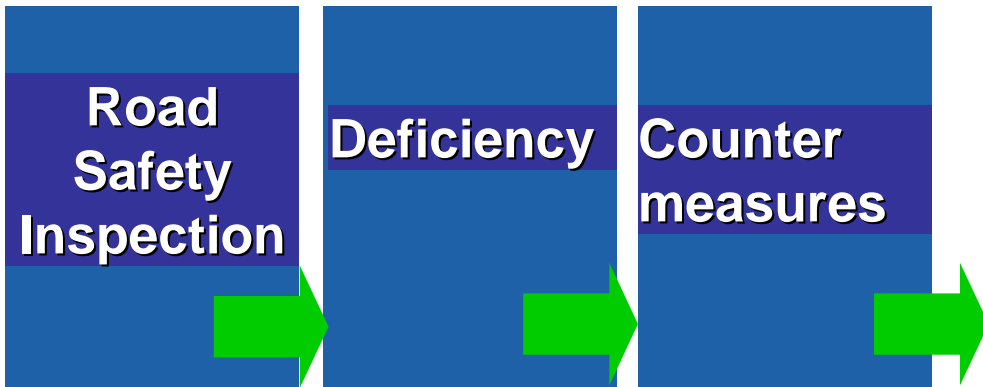


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Audio Tactile Edge Lining



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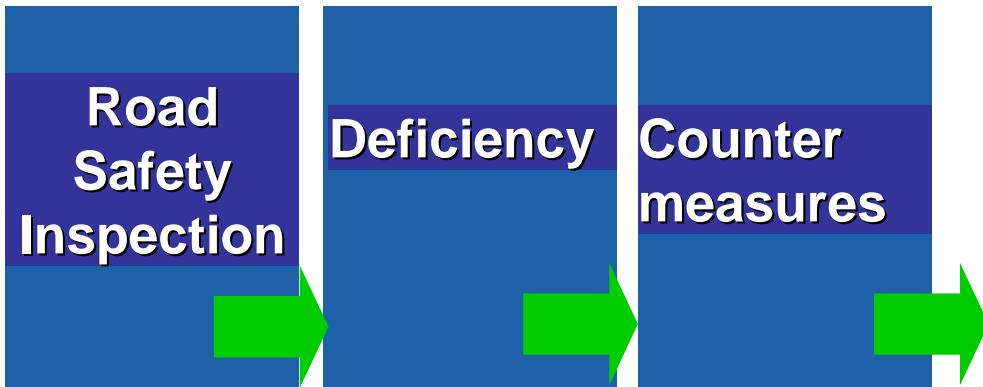


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Rest Areas



Process

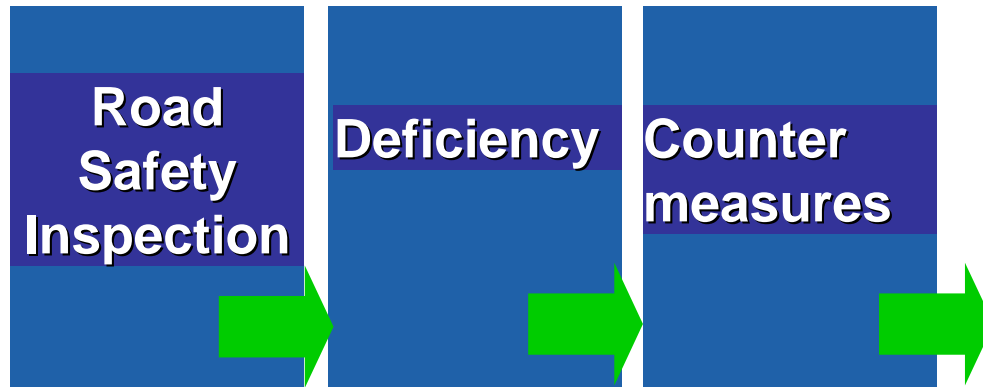


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Line marking



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Signage



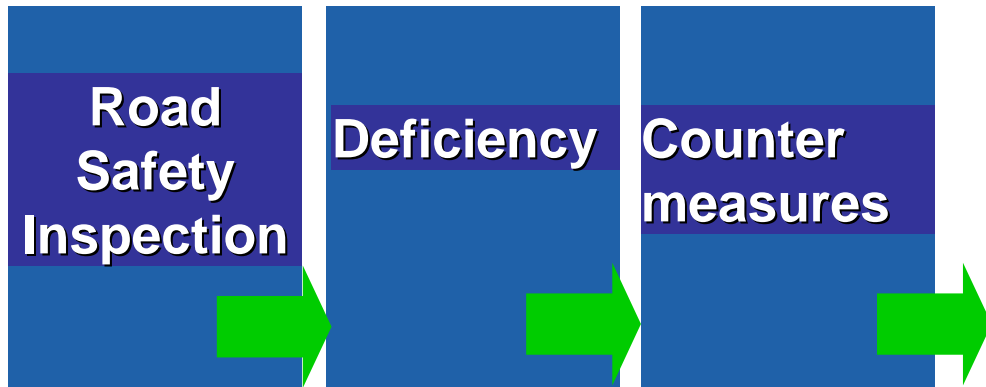
Signage



Signage



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In Australia:

- Default urban speed limit has dropped from 60 to 50km/h
- 100 to 80km/h on selected Hilly roads
- 110 to 100km/h on selected rural roads
- Casualty crashes decreased by approximately 20% on all roads where the speed limit was reduced
- 25km/h – 40km/h school zones
- 40km/h shopping precincts/residential areas



Thank you for your attention

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