

PASSING & OVERTAKING POLICY FOR STATE HIGHWAYS

IPENZ TRANSPORTATION CONFERENCE

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Passing & Overtaking Policy For State Highways

OUTLINE

- **General introduction.**
- **Outline of strategy.**
- **Policy Implementation.**
- **Conclusions.**



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KEY WORDS

- **PASSING:** vehicles use passing facilities to pass slower vehicles.
- **OVERTAKING:** vehicles cross into the opposing traffic lane to pass slower vehicles.
- **TREATMENTS:** are applied directly to the roading infrastructure.
- **MEASURES:** act on driver behaviour.
- **2+1 LANES:** continuous alternating passing lanes.



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ESTIMATED DISTRIBUTION OF TRAFFIC FLOWS		
AADT (vpd)	Current * (km)	Next 25 - 30 years (km)
10,000 - 25,000	200	1,100
4,000 - 10,000	2,300	3,200
< 4,000	7,400	5,600
TOTALS	9,900	9,900

*** Does not include SH sections in urban areas or SH sections identified for four-laning in rural areas.**



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KEY FEATURES OF POLICY

- Divided into four stages.
- At lower flows, retain and enhance overtaking opportunities.
- Interim and long-term strategy for configuration and design of passing facilities.
- Where appropriate, intermediate step between two and four-lanes.
- Supporting treatments and measures.



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STRATEGY STAGES

STAGE	PROJECTED AADT (vpd)
Overtaking	Mainly < 2,000
Mainly Overtaking	2,000 - 5,000
Passing and Overtaking	4,000 - 12,000
Passing	10,000 - 25,000



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INDICATIVE LONG-TERM STRATEGY FOR PASSING & OVERTAKING TREATMENTS					
Proj AADT ¹ (vpd)	Road Gradient ¹				
	Flat	Rolling	Mountainous		
0 - 2,000	Overtaking (OT) (OT SD improvements, OT enhancements, possible isolated shoulder widening / SVBs ² / short PLs).				
2,000 - 4,000	OT (As above).	Mainly OT. Possibly some SVBs ² / short PLs @ 10 km.			
4,000 - 5,000 (Transition)	Mainly OT. Possibly some SVBs ² / short PLs @ 10 km.	PLs @ 5 – 10 km, 1.2 km & OT enhancements.	PLs @ 5 km, 1 km. If possible OT enhancements.		
5,000 - 7,000	PLs @ 5 or 10 km, 1.2 km & OT enhancements.				
7,000 - 10,000	PLs @ 5 or 10 km, 1.5 km & OT enhancements.		PLs @ 5 km, 1.2 km. If possible OT enhancements.		
10,000 - 12,000 (Transition)	PLs @ 5 km, 1.5 km. Poss OT enhancemt.	2+1 lanes (Compare with four-lanes).		PLs @ 5 km, 1.2-1.5 km.	
12,000 - 20,000					
20,000 - 25,000 (Transition)					
Key	O'taking	Mainly O'taking	Passing & O'taking	Passing	
Notes: PL lengths excl tapers. 1= As well AADT and road gradient, other factors will affect actual layout. 2 = SVBs able to be easily lengthened, if required.					



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INTEGRATION OF TREATMENTS & MEASURES

STRATEGY	O'taking	Mainly O'taking	Passing & O'taking	Passing
Projected Traffic Flows (vpd)	< 4,000	2,000 - 5,000	4,000 - 12,000	10,000 - 25,000
OVERTAKING				
O'taking Sight Dist Impvts	C	C	C	-
O'taking Enhancements	A	A	A	
PASSING				
Low Volume Treatments	A*	A*	-	-
Mod-Volume Treatments	-	-	A	A
SUPPORTING				
Centreline Roadside & Edgeline	A	A	A	A
Intersections	C	C	A	A
Resource Planning	C	C	C	A
Education	C	C	C	A
Enforcement	C	C	C	A
TDM	C	C	C	A
ITS	C	C	C	C

NOTE: A = apply. C = consider if problem. * = apply if overtaking not viable.



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OVERTAKING TREATMENTS

Overtaking Sight Distance Improvements

- **Vegetation clearance**
- **Corner/batter relocation.**
- **Shape corrections.**
- **Realignments.**

Overtaking Enhancements

- **Seal widening.**
- **Passing lane configuration.**
- **If available sight distance, overtaking at passing lanes at lower flows.**



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2+1 LANES WITH GAP SEPARATION, GERMANY

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2+1 LANES WITH MEDIAN BARRIER, SWEDEN



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INTERSECTION AT CRITICAL TRANSITION, SWEDEN



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WHAT IS TRANSIT DOING?

- **Transition period till end of 2007/08.**
- **Key documents - Guidelines.**
 - **Regional PO Plans.**
- **System changes - Traffic Monitoring**
 - **PROMAN.**
 - **Web page.**
- **Working with other organisations.**
- **Research.**



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CONCLUSIONS

- **More efficient use of two-lane state highways in rural and peri-urban (urban peripheral) areas.**
- **Wide range of treatments and measures (not just infrastructure solutions).**
- **Changes to some Transit systems and activities to assist implementation of Policy.**
- **Contact larry.cameron@transit.govt.nz**

