



**XXIVth World
Road Congress
Mexico 2011**
Mexico City 2011.

MAKING EXISTING ROADS OPERATE BETTER

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Melbourne's transport demands are growing



5m by 2030



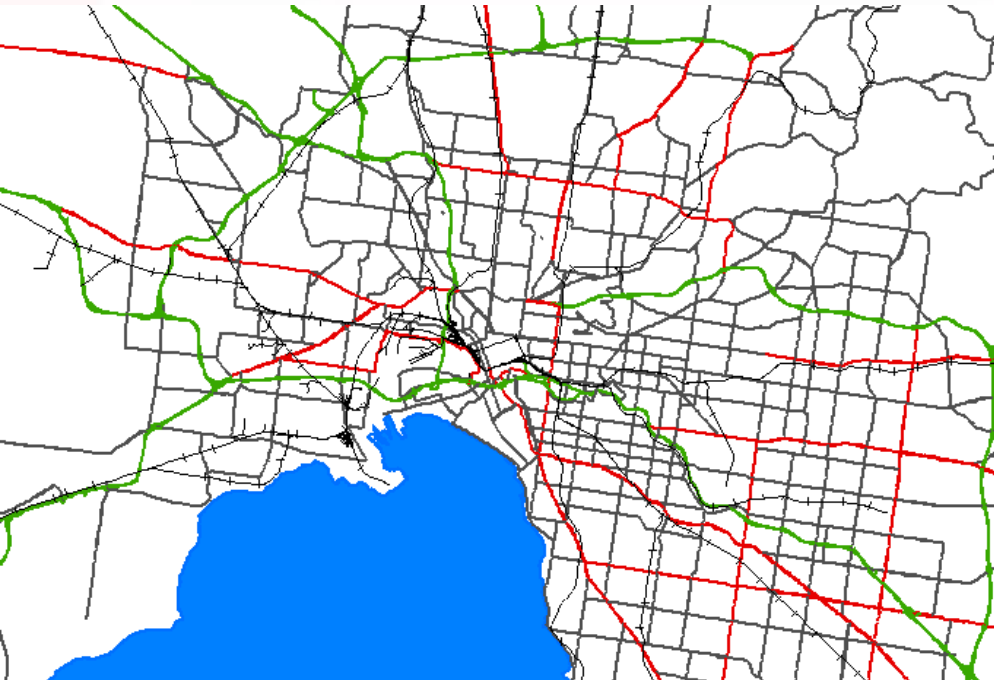
Doubling by 2030



10% annual growth

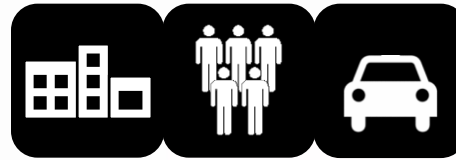


- 80% services use roads
- 6% annual growth

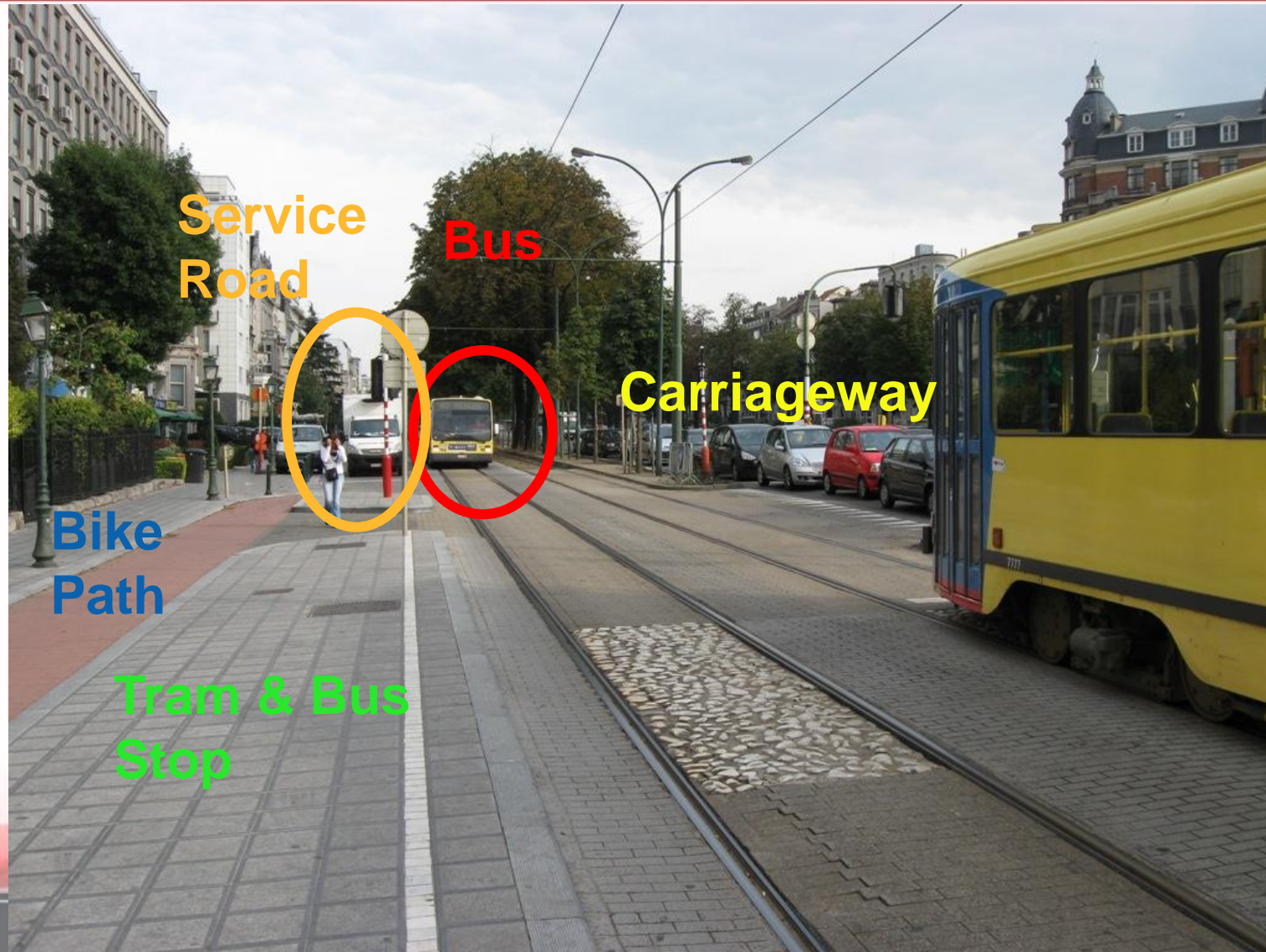


There is no single solution to managing congestion

- Integrate transport & land use
- Encourage more sustainable modes
- Better manage existing roads
- Traveller information
- Build new infrastructure



Prioritising modes on a road - Brussels



Melbourne – how to prioritise?



Melbourne – how to prioritise?

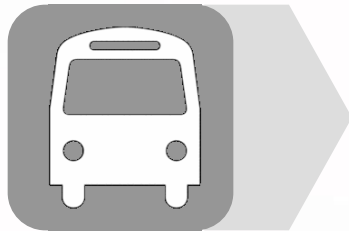


Melbourne – how to prioritise?

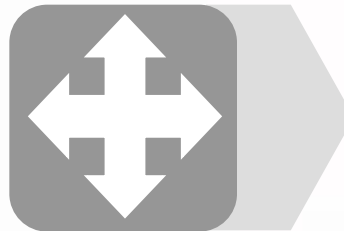


SmartRoads uses a simple 3 step framework

**Road Use
Hierarchy**



**Network
Operating
Plan**

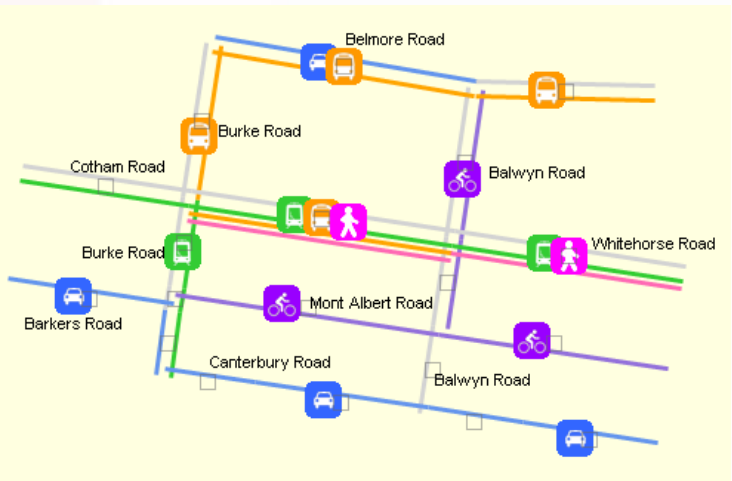


**Network
Operating
Gaps**

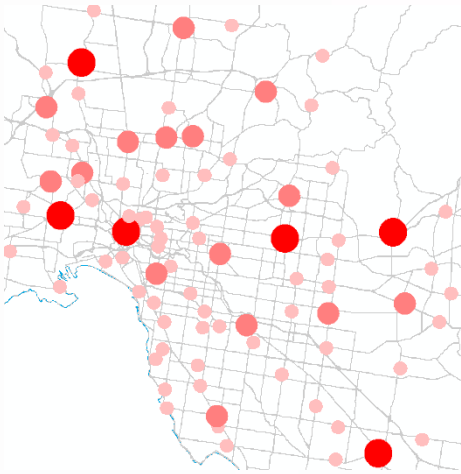


Road Use Hierarchy

By Mode



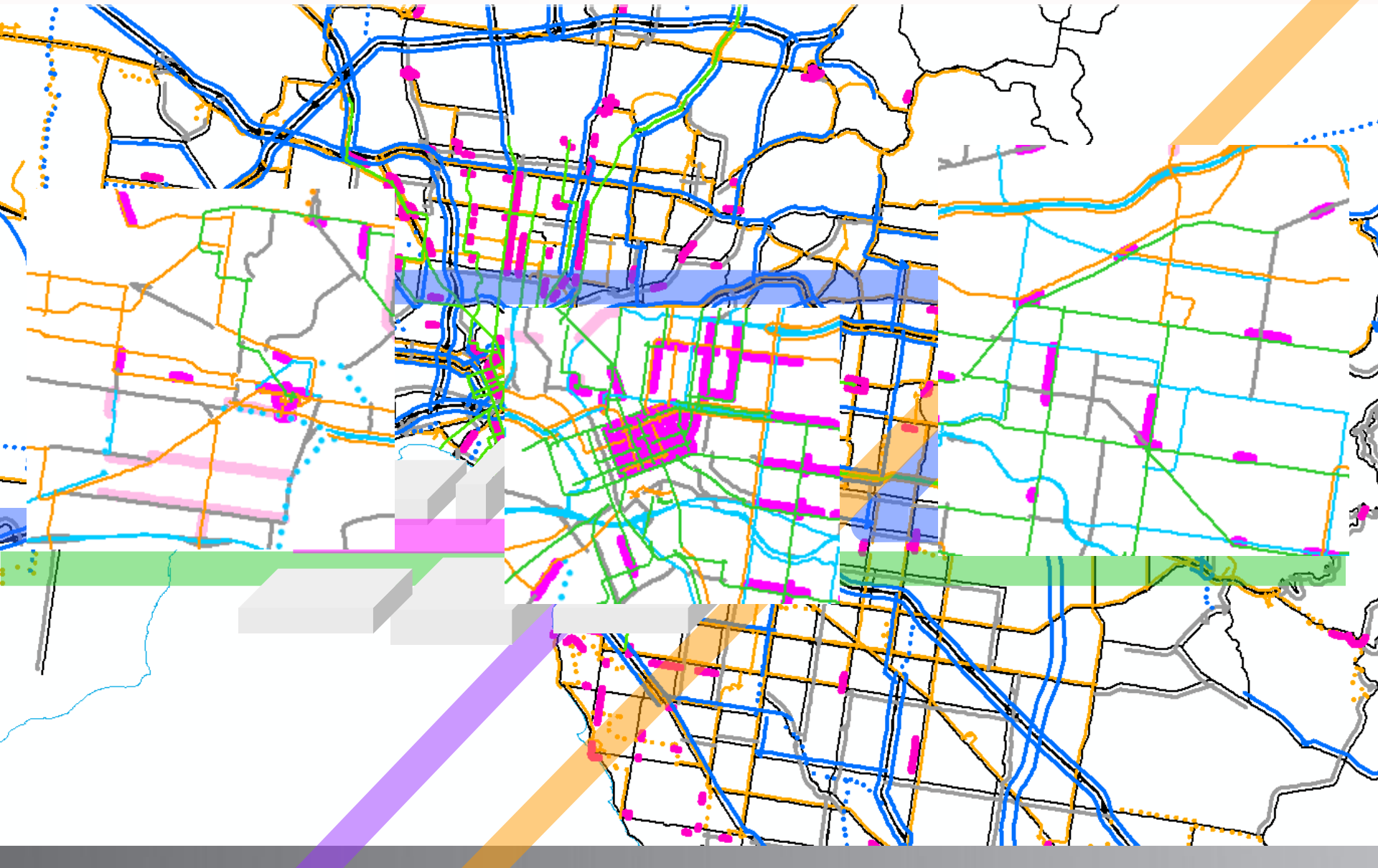
By Place



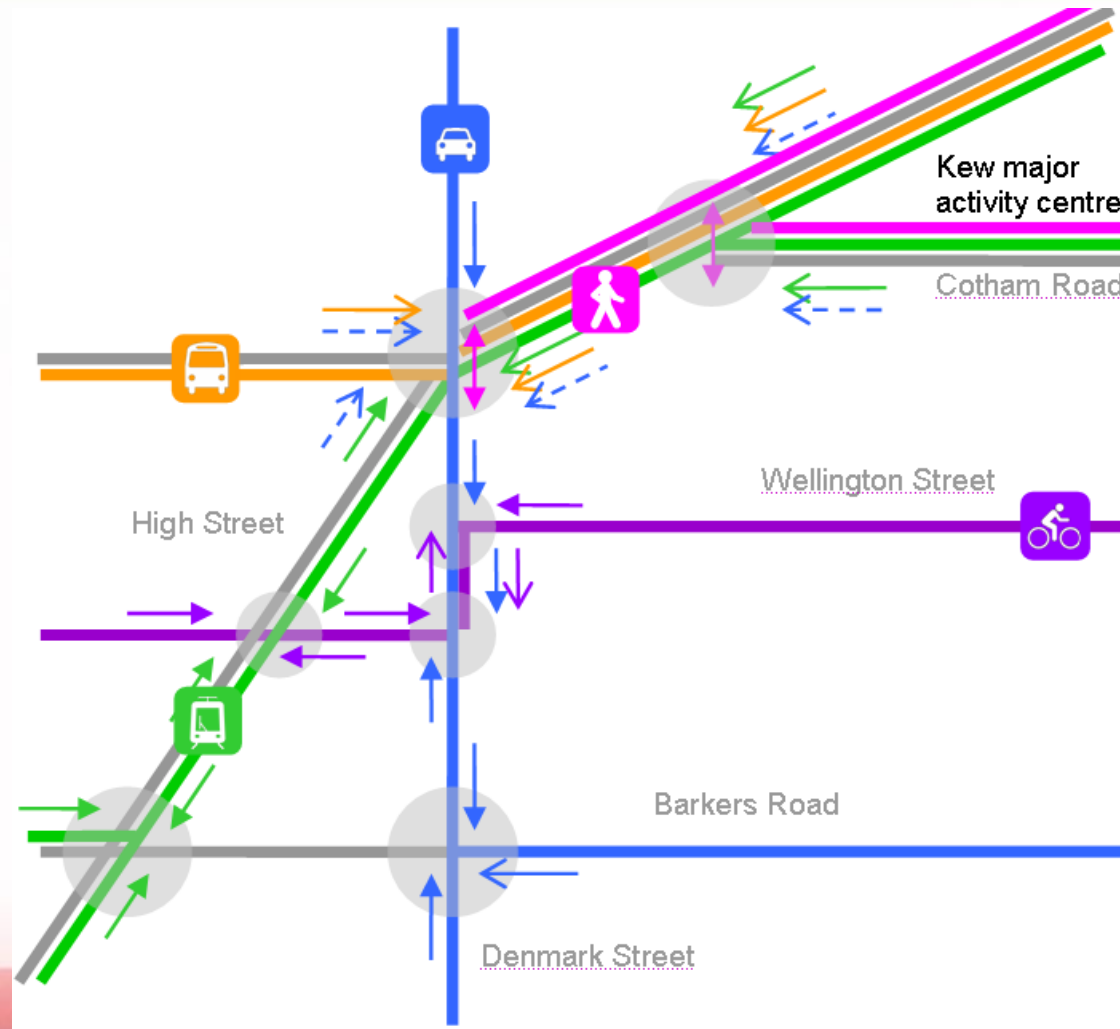
By Time of Day



A Road Use Hierarchy was developed in consultation with local government








There are network operating plans covering all of Melbourne over 4 time periods



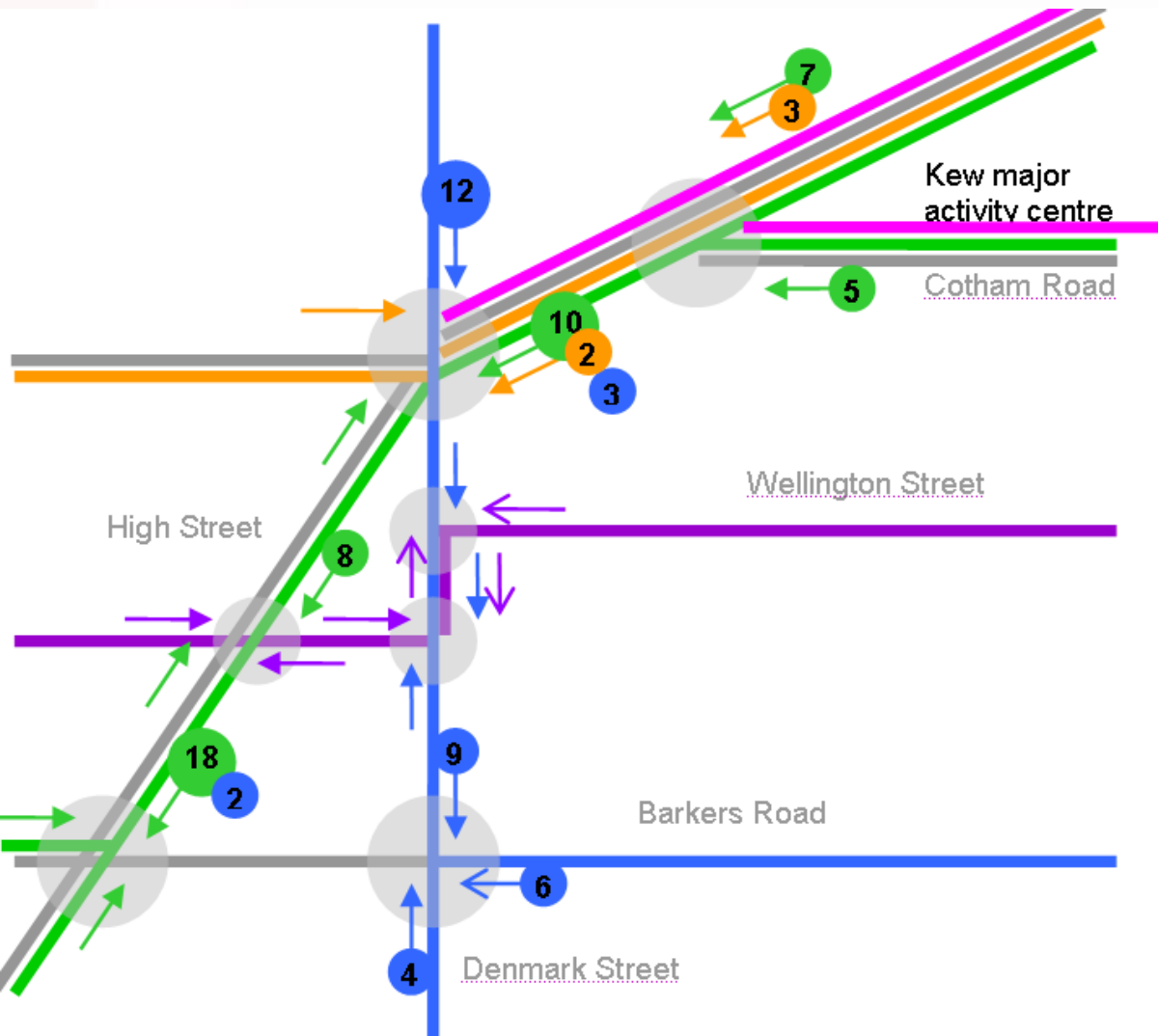
High Street, Kew - Network Operating Plan (high off-peak)

Level of Service is used to measure how well we are going against the plan

reducing performance ↓	Level of Service					
	A	No route delay. Always runs to timetable.	Opportunities to cross within 50m. Minimal crossing delay.	High degree of separation. Minimal delay.	No delay. No variability.	No delay. No variability.
	B					
	C	Stop at every set of signals. Within 5 min of timetable.	Crossing within 200m. Average crossing delay is 45 sec.	On-road bicycle lane.	Stop at every set of signals.	Stop at every set of signals.
	D					
	E	Takes at least 3 signal cycles to clear intersection.	Crossing within 400m. Average crossing delay is 90 sec.	Bicycles share traffic lanes.	Takes at least 3 signal cycles to clear intersection.	Takes at least 3 signal cycles to clear intersection.
	F					



Bottlenecks in operation can now be identified



- 1** Bus Operating Gap
- 1** Tram Operating Gap
- 1** General Traffic Operating Gap
- 1** Pedestrian Operating Gap
- 1** Bicycle Operating Gap

SmartRoads

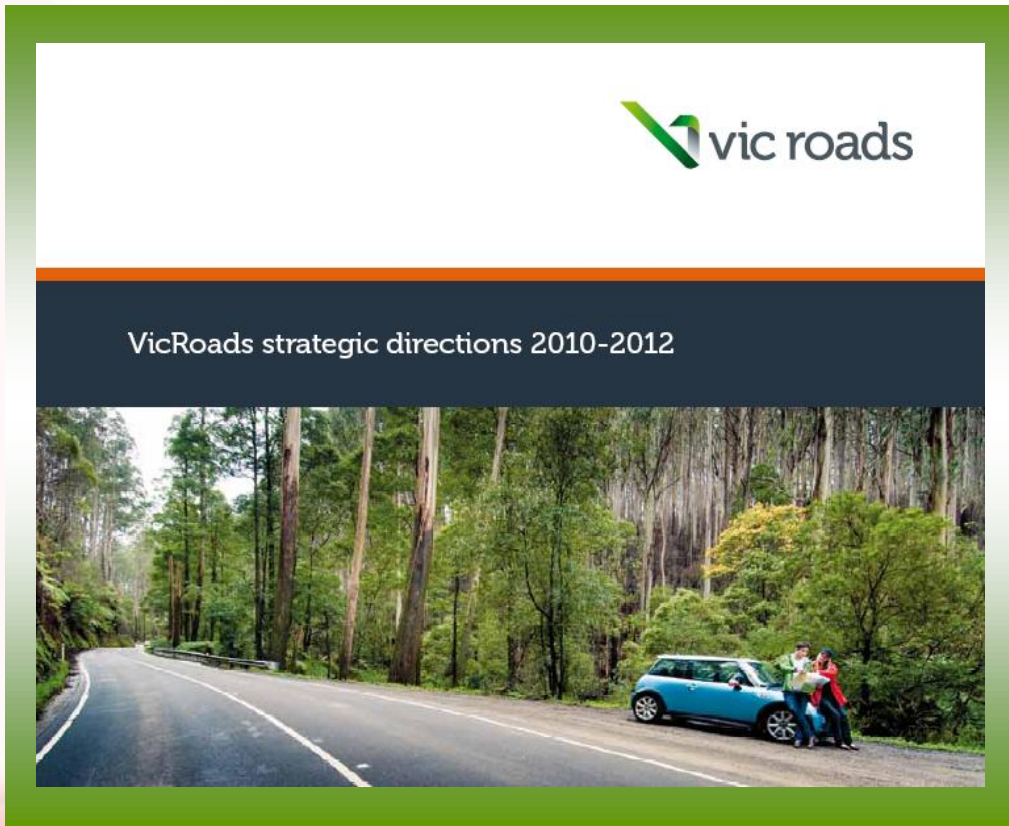
A plan for how the road network needs to operate

- Better manage use of roads
- Links transport to land use
- Encourages walking and cycling
- Emphasis on moving people and goods
- Balances competing demands for road space



An internal culture change

- Leadership and direction



"VicRoads will use the Network Operating Plan to inform all decisions that affect the way the arterial road network operates."



Where SmartRoads is being used

- Over 200 project proposals within VicRoads
- Major Projects
- Planning studies
- Activity centre planning
- Reviews of traffic signal operation
- Growth area planning
- Rural centres
- Local government planning



What SmartRoads is delivering

- A way to engage and consult with stakeholders
- A focus on moving people and goods NOT vehicles
- Encouragement for walking and cycling
- Integrated transport and land use decision-making
- A process that brings planners and operators together
- Triple bottom line approach to operational decisions
- Transparency in decision-making
- A change in how we think about transport

