# Appendix A – NZ Transport Agency Demonstrator Project Brief





## AUCKLAND OPTIMISATION PROJECT DEMONSTRATOR PROJECT BRIEF

# RUNNING BUSES ON MOTORWAY SHOULDERS

### **CUSTOMER PROBLEM STATEMENT**

Customer journeys, using public transport in Auckland road network like buses, suffer from long delays on Motorways and on and off ramps due to heavy traffic volumes during peak hours. During peak hours, motorways and their ramps are operating at or near the saturation conditions. Improving the number of people movements can only be achieved by improving movements of high occupancy vehicles like buses. Sufficiency large numbers of people are using public transport like buses on the Auckland road network. Each bus can carry up to 70 people, which is equivalent to 50 car movements. Creating dedicated space for buses to run on existing motorway shoulders, where possible, will dramatically improve people movements and efficiency across the strategic network within the Auckland region. This step change in managing motorway space will strongly communicate the customer based approach adopted by NZTA and AT in a highly visible fashion. This leap forward will have a significant impact in influencing travel behaviour change while creating additional people moving capacity. Bus travel times will improve significantly and journey time reliability will be consistent, which will in turn be the tipping point for numbers of commuters to switch travel modes to avoid chronic and unpredictable congestion.

### **PROJECT AREA**

The project area will be all Auckland Motorways and the interchanges.

### PROJECT APPROACH

The project will undertake a study into all sections of motorway on the Southern, South-Western, North-Western and Northern motorways and on and off ramps. Wider range of stakeholder needs to be involved especially AT Metro who are responsible for bus services and has experience in motorway bus shoulder running.

### Stages:

- Collecting necessary information both motorway and public transport for bus shoulder running.
- A review / analysis of existing bus shoulder running (number of busses, travel time saving, reliability, passenger numbers, and comparison with normal mainline flow). Similar to on and off ramps.
- Analysis and evaluation of existing bus journey trips using motorways but no shoulder running facility. Similar evaluation for on and off ramps.





- Input from AT metro to identify the potential bus shoulder running sections/ ramps.
- Impact analysis potentially bus-shoulder running from engineering and other aspects.
- Impact analysis on other potential motorway bus shoulder running sections.

### Milestones:

- 1. Collection of all relevant information /data, review existing bus shoulder running facility, potential (from AT metro) and other sections suitable for bus shoulder running. (inclusive ramps)
- Engineering evaluation of potential motorway sections and ramps with options development and impacts analysis (based on AT Metro input)
   Other potential sections of motorway corridors, which are suitable for bus, shoulder running option and impact analysis (high level)
- 3. Daft feasibility report with list of projects with potential delivery plan
- 4. Final report with programme and delivery plan
- 5. Implementation of at least one bus shoulder running facility
- 6. Continuation of implementation of other bus shoulder running facilities

### Time Frame:

Milestone 0: Early May

Milestone 1: 2 weeks

Milestone 2: 2 weeks

Milestone 3: June 2018

Milestone 4: June/July

Milestone 5: TBC

Milestone 6: TBC

To include text summary of key project phases, methodology to achieve timely delivery, decision making framework.

### SUCCESS FACTORS

Define what success will look like for the project (description and scale of benefit)

Proof of success will be improved number of people movements during peak hours and the travel time reliability for the public transport. The following evaluation/information after completion of project would show the positive results for:

- 1. Customers are happy (through customer survey)
- 2. Improved people movements (number and time)
- 3. Improved model shift (Survey, number) it would be medium/long term benefit





- 4. Improved PT travel time (value calculated)
- 5. Improved PT reliability (value calculated)
- 6. Cost benefit (value calculated)





### PROJECT DELIVERABLES

### Description of expected outputs eg

- 1. Feasibility report around problems, benefits analysis and recommendations
- 2. Programme with potential delivery plan (list of prioritised projects based on different criteria like easy to implement, low cost, high benefit etc.)
- 3. At least one bus shoulder running facility

### **PROJECT TEAM**

Team Member	Role	Key Responsibility
Ben-White	Project Sponsor	<ul> <li>Project overview</li> </ul>
(Randhir Karma)		<ul> <li>Senior management reporting</li> </ul>
Ranjan Pant	Project Manager	<ul> <li>Project Management (NZTA/AT side)</li> </ul>
		<ul> <li>Input into Project</li> </ul>
		<ul> <li>Work progress</li> </ul>
	!	<ul> <li>Design input</li> </ul>
		<ul> <li>Report review/feedback</li> </ul>
		<ul> <li>Implementation of one bus shoulder</li> </ul>
		facility
		<ul> <li>Proceed other potential projects</li> </ul>
TBC	Consultant	<ul> <li>Project Management</li> </ul>
		<ul> <li>Analysis and develop options</li> </ul>
		<ul> <li>Design</li> </ul>
		<ul> <li>Report</li> </ul>
AT Metro (TBC)	Major affected stakeholder	<ul> <li>input around necessary info from PT</li> </ul>
		side
TBC	Contractor	Physical delivery of the bus shoulder
		running facility/ies
	Communications	TBC
	Delivery Manager	TBC
	Project Support	AT Metro

### **DELIVERY AND COSTINGS**

The project will be completed by xxxxxx with a total cost of \$xxxx

No	Description	Resource	Start	Finish	Estimated Cost
1	Preliminary review	Consultant/AT /AT metro/ NZTA/ AMA/ATOC	Early May		
2	Analysis Evaluation	Consultant/AT /AT metro			
3	Draft Report	Consultant/ NZTA/AT		June 18	
5	Final Report	Consultant / NZTA /AT		July 18	





6 Implementation Consultant/Contractor/ TBC TBC TBC NZTA/AT

### **KEY STAKEHOLDERS**

Stakeholder	Interest
AT Operations	
AT Strategy	
AT Metro	
NZTA	
AMA	
Bus Operator	
AT Comments	
Grand Control of	
Spirite Ministry	