11.0 SURFACE ROAD IMPACTS

Modelling associated with major road projects is typically limited to assessing the impact of vehicle emissions associated with the road under construction. In this instance a more comprehensive assessment has been undertaken to include the prediction of dispersal and transport of air pollutants emitted from vehicles along key surface roads and intersections. The roads selected for assessment are likely to experience a significant change (either increase or decrease) in either total vehicle or HCV volumes, hence modified local air quality, arising either directly or indirectly from operation of North East Link.

This approach is consistent with risk AQ14 identified in Section 7.0, *impact on sensitive receptors from air quality changes associated with operation and* maintenance, *based on traffic volume projections*.

11.1 Road selection

Modelled roads were selected based on predicted changes in traffic volumes or fleet mix due to North East Link. The modelling selection criteria were as follows:

Number of vehicles with or without project in 2036 is greater than 30,000 vehicles per day, with the change in total vehicles (no project to project case) greater than an increase or decrease of 25 per cent

or

HCV volume with or without project in 2036 is greater than 1,000 vehicles per day, with the change in HCVs (no project to project case) greater than an increase or decrease of 25 per cent.

Road segments that satisfy the selection criteria are listed in Table 67. If any section of road within this segment meets the criteria, the entire road segment was subject to assessment. The maximum changes in HCV's and total vehicles within sections of the road segments are also shown in Table 67. Figure 73 presents the selected roads graphically with blue lines indicating a decrease in traffic and red lines indicating an increase in traffic. The dotted line shows the project roads including the North East Link alignment and upgraded Eastern Freeway with bus lanes. Further details of the roads considered for modelling are presented in Table 67.

Table 67: Selected surface roads

		% Change (Project and No Project 2036 volumes)	
Road	Segment	■ HCV	■ Total
Albert St	Bell St to Plenty Rd	-63%	-6%
Banksia St	Bulleen Rd to Bell St	-65%	16%
Bell St	High St to Plenty Rd	-43%	2%
Bolton St	Bridge St to Main Rd	-56%	-27%
Broadway	High St to Bolderwood Pde	-50%	0%

	Segment	% Change (Project and No Project 2036 volumes)	
Road		■ HCV	■ Total
Bulleen Rd	Eastern Fwy to Manningham Rd	-53%	4%
Chandler Hwy	Eastern Fwy to Heidelberg Rd	-44%	-7%
Dalton Rd	Childs Rd to McKimmies Rd	50%	1%
Darebin Rd	Station St to Grange Rd	-54%	-3%
Eastern Fwy	Springvale Rd to Bulleen Rd	70%	54%
Eastern Fwy ⁽¹⁾	Bulleen Rd to Hoddle St	-6%	13%
Fitzsimons Ln	Reynolds Rd to Main Rd	-54%	-22%
Grange Rd	Darebin Rd to Heidelberg Rd	-56%	-9%
Greensborough Rd	Lower Plenty Rd to M80 Ring Rd	-91%	-67%
Grimshaw St	Watsonia Rd to Greensborough Hwy	83%	17%
High St	Broadway to M80 Ring Rd	-39%	4%
Keon Pde	High St to Dalton Rd	38%	21%
Lower Plenty Rd	Rosanna Rd to Greensborough Rd	-75%	-19%
M80 Ring Rd	M80 Interchange to Hume Fwy	123%	57%
Main Rd	Fitzsimons Lane to Para Rd	-58%	-25%
Manningham Rd	Thompsons Rd to Williamsons Rd	-70%	-25%
Middleborough Rd	Whitehorse Rd to Eastern Fwy	54%	8%
Plenty Rd	Albert St to M80 Ring Rd	-41%	-16%
Reynolds Rd	Blackburn Rd to Williamsons Rd	-45%	-16%
Rosanna Rd	Lower Heidelberg Rd to Lower Plenty Rd	-85%	-26%
Station St	Bell St to Darebin Rd	-53%	-8%
Williamsons Rd	Foote St to Warrandyte Rd	-53%	-10%

Note 1. Whilst this segment does not satisfy the selection criteria it has been included to include all of the modified Eastern Freeway.