

Table 5.2r
Summary of Pollutant Emissions for Recommended Transport Strategy

Scenario	vkt relative to 1997	NO _x relative to 1997	VOC relative to 1997	RSP (Tailpipe) relative to 1997	RSP (Paved Road Dust) relative to 1997	Composite Air Score
2001	119%	102%	103%	78%	123%	1.01
2006 High Growth	147%	91%	101%	56%	146%	0.95
2006 Medium Growth	139%	88%	95%	54%	141%	0.91
2011 High Growth	184%	91%	100%	48%	183%	0.99
2011 Medium Growth	160%	82%	88%	44%	169%	0.89
2016 High Growth (High End)	248%	114%	134%	59%	219%	1.25
2016 High Growth (Low End)	220%	107%	120%	57%	215%	1.17
2016 Medium Growth	179%	92%	99%	50%	191%	1.01
2016 Low Growth	145%	76%	80%	41%	159%	0.83

5.3 *PATH Model Analysis*

5.3.1 The PATH Modelling System

5.3.1.1 Overview

The air quality assessment undertaken in this assignment has utilised the PATH (Pollutants in the Atmosphere and their Transport over Hong Kong) modelling system. PATH is a state-of-the-art, comprehensive regional air quality modelling system specifically designed for the simulation of air quality in Hong Kong.

The modelling system incorporates the following components:

- a multi-scale, non-hydrostatic numerical meteorological model (MM5);
- a multi-scale, multi-species air quality model (SAQM);
- a state-of-the-art emission modelling system (EMS-95) coupled with a two-tiered comprehensive emissions inventory for Hong Kong and, at lower resolution, for southern China;
- a relational database and pre-processor system for storing and managing data and generating databases for model operation and validation;
- a post-processing module for analysis, interpretation and display of model outputs, including visualisation capabilities; and
- an intelligent, user-friendly interface with an on-line help system, which makes extensive use of Graphical User Interface (GUI) and GIS technology.