



# Northampton Gateway

## Construction Traffic

### Calculation Methodology

The total mass of material required for each of the key components has been estimated.

The key components being:-

- Road (on Site)
- Road (off site J15 / 15a Improvements)
- Road (off site bypass / A508 improvements)
- Bridge
- Earthworks
- Buildings
- Landscaping
- Rail (Track)
- Rail (Terminal)

The total number of HGV movements has been calculated based on 18.5T per movement.

The total number of LGV movements has been calculated based on the following percentages of the HGV movements:-

- Road (on site) 20%
- Road (off site) 20%
- Bridge 40%
- Earthworks 50%
- Buildings 20%
- Landscaping n/a
- Rail (Track) 50%
- Rail (Terminal) 20%

It has been assumed that cars have an occupancy rate of 1, and vans have an occupancy rate of 3.

The number of days has been calculated at 49 weeks x 5 day = 245 day per year.

To establish the daily movements the total has been divided by the days per year x duration in years.

# Northampton Gateway - Construcion Traffic Movements (One Way)

Rev A

## Project Summary

Row Labels	Avg Daily Oneway Movements	Sum of Peak Daily Movements
<b>Yr 1</b>	<b>455</b>	<b>909</b>
HGV	147	293
LGV	33	67
Car	117	235
Vans	157	314
<b>Yr 2</b>	<b>515</b>	<b>1,029</b>
HGV	171	343
LGV	39	78
Vans	175	351
Cars	129	258
<b>Yr 3</b>	<b>334</b>	<b>667</b>
HGV	125	251
LGV	28	55
Car	86	172
Vans	95	189
<b>Yr 4</b>	<b>170</b>	<b>340</b>
HGV	72	144
LGV	14	29
Car	36	72
Vans	48	96
<b>Yr 5</b>	<b>170</b>	<b>340</b>
HGV	72	144
LGV	14	29
Car	36	72
Vans	48	96
<b>Yr 6</b>	<b>85</b>	<b>170</b>
HGV	36	72
LGV	7	14
Car	18	36
Vans	24	48
<b>Yr 7</b>	<b>0</b>	<b>0</b>
HGV	0	0
LGV	0	0
Car	0	0
Vans	0	0
<b>Grand Total</b>	<b>1728</b>	<b>3,457</b>

Construction traffic	One-way traffic movements	Worst case year			
Operatives (Car & Vans)	304	Year 2	80% arrive for start of day at 0700 hours and depart at 1900 hours movements spread over 10 hour working day	resultant hourly flow	243
HGV	171	Year 2		resultant hourly flow	17
LGV	39	Year 2		resultant hourly flow	4

Assignment of Operatives		
Distribution of main routes from NSTM	Route	Trips
45.1%	A45	109
20.5%	M1 South	50
19.5%	A508	37
15.1%	M1 North	47
	Total	243