#### **APPENDIX 14.2: TRAFFIC DATA**

A summary of the traffic data use in the assessment is presented below. Traffic data were provided by Royal Haskoning DHV.

To ensure a conservative, robust assessment the proposed development traffic flows provided by Royal Haskoning DHV were calculated from traffic generation during the peak August month. In addition Royal Haskoning DHV applied a 20% contingency to the following to provide a robust assessment:

- Construction vehicle trip generation;
- Lodge trip generation;
- Day-visitor trip generation; and
- Staff trip generation.

TEMPRO growth factors adjusted by the National Transport Model (NTM) were used by Royal Haskoning DHV to derive baseline flows in the assessment years for the roads in the study area.

Traffic data include committed developments including Bolton Copper Works.

As discussed within **ES Chapter 14: Air Quality**, emission factors were calculated using the EFT v6.0.1, provided by DEFRA. To ensure a worst case assessment it was assumed that there would be no improvement in emission factors from the modelled verification year of 2013 in future years.

A number of road links have been broken down into sections to allow the conditions to be better reflected within the model, for example to allow speeds to be reduced on the approaches to junctions, following technical guidance provided within LAQM.TG(16).

Model verification was performed for the year 2013 (the latest year for which monitoring data were available). Traffic data for 2013 were scaled from the 2016 baseline traffic using the annual growth in traffic on the A52 in the DfT traffic count data.

#### 2016 Baseline

Road Link	AADT	%HGV	Speed (kph)
1	2,214	7	52.3
2	1,899	8	59.8
3	186	8	38.1
4	243	9	38.1
5	2,194	9	49.1
6	712	3	27.2
6_junc	712	3	27.2
7	2087	9	48.0
7_fast	2087	9	48.0
8	54	19	38.1
9_junc	542	4	21.3
9	542	4	21.3
10	57	14	50.9

#### 2013 Baseline

Road Link	AADT	%HGV	Speed (kph)
1	2208	7	52.3
2	1894	8	59.8
3	185	8	38.1
4	242	9	38.1
5	2188	9	49.1
6	710	3	27.2
6_junc	710	9	27.2
7	2081	19	48.0
7_fast	2081	4	48.0
8	54	14	38.1
9_junc	540	4.4	21.3
9	540	4.4	21.3
10	57	14	50.9

# 2013 Estimated Baseline (from 2016, Based On Annual Traffic Growth 2013-2015, A52, DfT Traffic Counts)

Road Link	AADT	%HGV	Speed (kph)
1	2208	7	52.3
2	1894	8	59.8
3	185	8	38.1
4	242	9	38.1
5	2188	9	49.1
6	710	3	27.2
6_junc	710	9	27.2
7	2081	19	48.0
7_fast	2081	4	48.0
8	54	14	38.1
9_junc	540	4.4	21.3
9	540	4.4	21.3
10	57	14	50.9

## **2020 Without Development**

Road Link	AADT	%HGV	Speed (kph)
1	4,981	3.2	52.3
2	4,652	3.5	59.8
3	195	7.5	38.1
4	254	9.1	38.1
5	2,298	9.4	49.1
6	746	3.1	27.2
6_junc	746	3.1	27.2
7	2186	9.4	48
7_fast	2186	9.4	48
8	57	18.5	38.1
9_junc	576	4.4	21.3
9	576	4.4	21.3
10	60	14	50.9

## **2020 With Development**

Road Link	AADT	%HGV	Speed (kph)
1	5,539	11.6	52.3
2	4,932	12.7	59.8
3	258	3.3	38.1
4	318	4.0	38.1
5	2,302	5.5	49.1
6	809	4.8	27.2
6_junc	809	4.8	27.2
7	2244	5.3	48
7_fast	2244	5.3	48
8	894	1.1	38.1
9_junc	1414	1.9	21.3
9	1414	1.9	21.3
10	60	14.04	50.9

## 2035 Without Development

Road Link	AADT	%HGV	Speed (kph)
1	5,409	3.45	52.3
2	5,019	3.80	59.8
3	233	7.53	38.1
4	304	9.05	38.1
5	2,747	9.39	49.1
6	891	3.09	27.2
6_junc	891	3.09	27.2
7	2613	9.39	48
7_fast	2613	9.39	48
8	68	18.52	38.1
9_junc	689	4.41	21.3
9	689	4.41	21.3
10	71	14.04	50.9

## 2035 With Development

Road Link	AADT	%HGV	Speed (kph)
1	5,967	3.13	52.3
2	5,299	3.60	59.8
3	296	5.92	38.1
4	367	7.50	38.1
5	2,751	9.38	49.1
6	954	2.89	27.2
6_junc	954	2.89	27.2
7	2672	9.18	48
7_fast	2672	9.18	48
8	905	1.38	38.1
9_junc	1526	1.99	21.3
9	1526	1.99	21.3
10	71	14.04	50.9

### DfT Data 2013

Count Point	AADT	%HGV
17197 A520 North of Cellarhead Jct	9284	6.73
36561 A52 East of Cellarhead Jct	8678	4.03
56537 A52 West of Cellarhead Jct	10881	2.56
56819 A520 South of Cellarhead Jct	10343	7.59