

The West Midlands Rail Freight Interchange Order 201X  
Technical Appendix 7.8 - WSP WMI Transport Technical Note  
Regulation 5(2)(a)  
WSP - September 2017

# Appendix 7.8 – WSP WMI Transport Technical Note

## WEST MIDLANDS INTERCHANGE Transport Technical Note – Wolverhampton AQMA Change in HGVs

<b>Job Title</b>	West Midlands Interchange	<b>Project Number</b>	70001979
<b>Client</b>	Four Ashes Limited		
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<b>Subject</b>	Wolverhampton AQMA Change in HGVs		
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<b>Distribution</b>			

### 1 INTRODUCTION

- 1.1 Regardless of whether WMI is developed or not Wolverhampton will still require the same volume of goods vehicle deliveries in the future. Hence the same level of HGV traffic will continue to enter and leave Wolverhampton with or without WMI. WMI itself will not generate a need for additional goods in Wolverhampton.
- 1.2 Without WMI, goods will come from all over the UK, but with WMI there will be a greater volume using the A449 between Wolverhampton and WMI. As a result there is no overall increase in traffic in Wolverhampton with the construction of WMI but there is a localised increase on the A449 and associated decreases on other roads if WMI is built.

### 2 CHANGE IN HGV VOLUMES ON LINKS IN WOLVERHAMPTON AQMA

- 2.1 In order to establish the roads the HGVs would use to access Wolverhampton if WMI was not constructed it is necessary to examine the existing travel patterns of HGV traffic and therefore reassign the predicted WMI HGVs onto these roads. Average daily HGV traffic flows for the arterial roads entering Wolverhampton have been taken from the DfT traffic counts for 2016 and totalled and then the proportion for each link calculated. This is shown in Table 1 and Figure 1 below

Table 1: 2016 AADT HGV Flow

Link*	Name	HGV Average Daily Flow (Veh)**	Proportion (%)
A	A454 west	229	4%
B	A449 south	824	13%
D	A459	158	3%
E	A4123	390	6%
G	A41 south	585	9%
H	A454 east	2073	34%
T	A41 north	209	3%
27	A449 north	1211	20%
V	A460	495	8%

\*Link reference matches those used for the Air Quality traffic data  
 \*\* From DfT Traffic Counts

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Figure 1: Wolverhampton Arterial Roads



- 2.2 The volume of WMI HGV traffic entering and exiting Wolverhampton is obtained from the VISSIM model and factored up to daily flows. This traffic would use the A449, entering the Wolverhampton AQMA by crossing the M54 at J2. If WMI was not constructed this HGV traffic would still enter / exit Wolverhampton but would use all the arterial links based on the proportions in Table 1. Table 2 sets this out numerically.

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Table 2: Assignment of HGV Traffic in Wolverhampton, With and Without WMI

Link*	Name	With WMI (HGV AADT)	Without WMI (HGV AADT)	Change in HGV Flows wit WMI
A	A454 west		25	-25
B	A449 south		60	-60
D	A459		17	-17
E	A4123		42	-42
G	A41 south		64	-64
H	A454 east		226	-226
T	A41 north		23	-23
27	A449 north	672	132	+540
V	A460		54	-54
Total		672	672	0

\*Link reference matches those used for the Air Quality traffic data

- 2.3 Table 2 demonstrates that with WMI, although there is an increase in HGV traffic on the A449 there is a reduction on all other arterial routes around Wolverhampton. Overall there is no change in the volume of HGVs in the Wolverhampton AQMA as a result of WMI.