

Appendix 50

HTp/1107/TN/20 – Traffic Growth (May 2017)

Highgate*Transportation*

**Land at Peel Hall, Warrington
Technical Note on Traffic Growth**

(HTp/1107/TN/20)

May 2017

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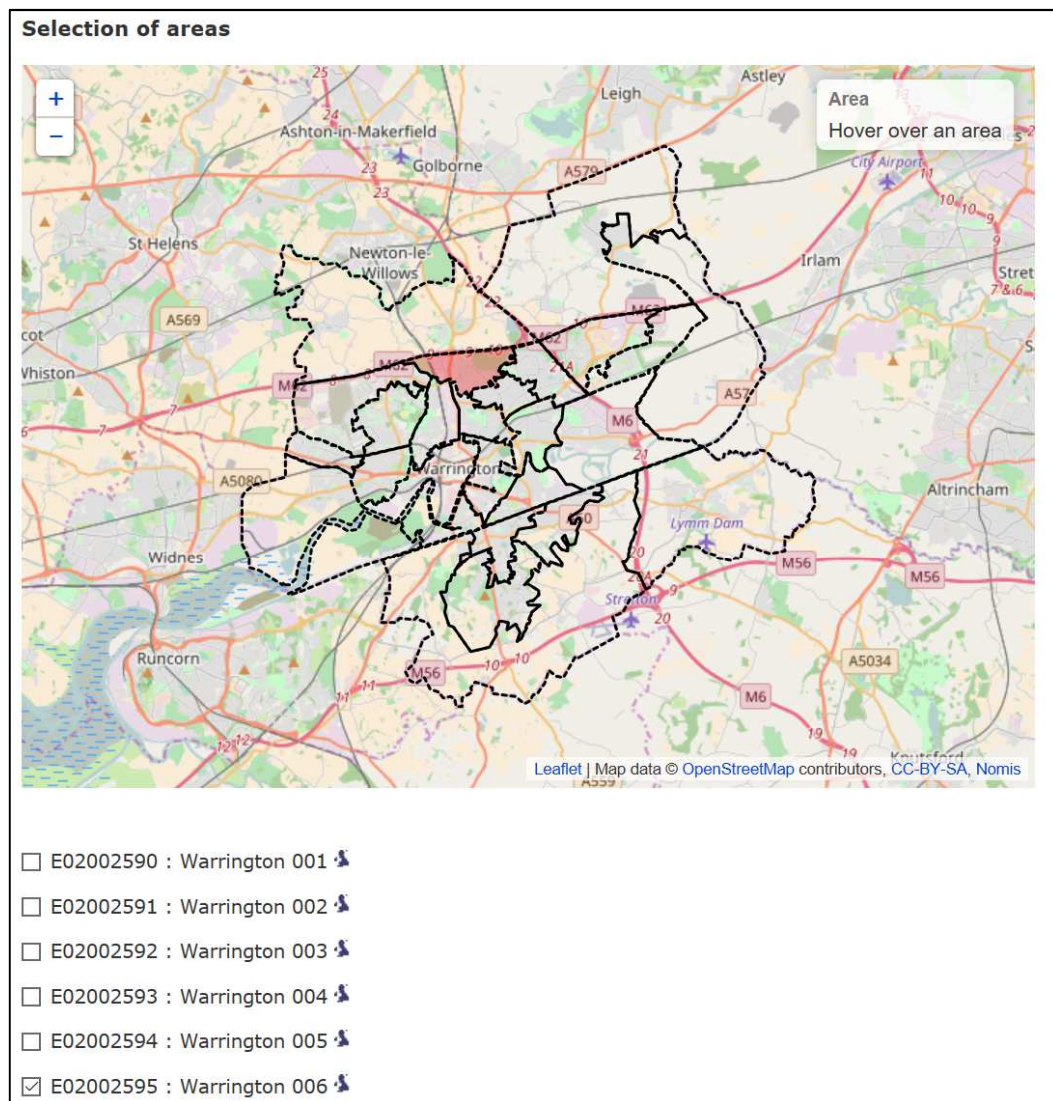
1.0 Introduction

- 1.1 This Technical Note has been prepared by Highgate Transportation Limited further to Technical Note TN/07/Addendum on Traffic Growth (October 2016), to update the growth rates used for modelling the traffic impact of the proposed Peel Hall development in the future years of 2025 and 2030.
- 1.2 Previously TEMPRO 6 (version 6.2) was used. However, now that the modelling is being revised the opportunity has been taken to use TEMPRO 7. The latest version currently available is version 7.2, which has been used for this exercise.
- 1.3 Technical Note TN/07 on Growth Rates dated May 2016 set out that there was an agreement to use Motorway growth rates for the modelling. It should be noted that this represents an over-estimate for the traffic growth over much of the model network because it is the highest growth factor from this dataset in the TEMPRO programme; it will nevertheless provide confidence in the modelling results as well as account for trips from the OMEGA development.

2.0 Growth Rates

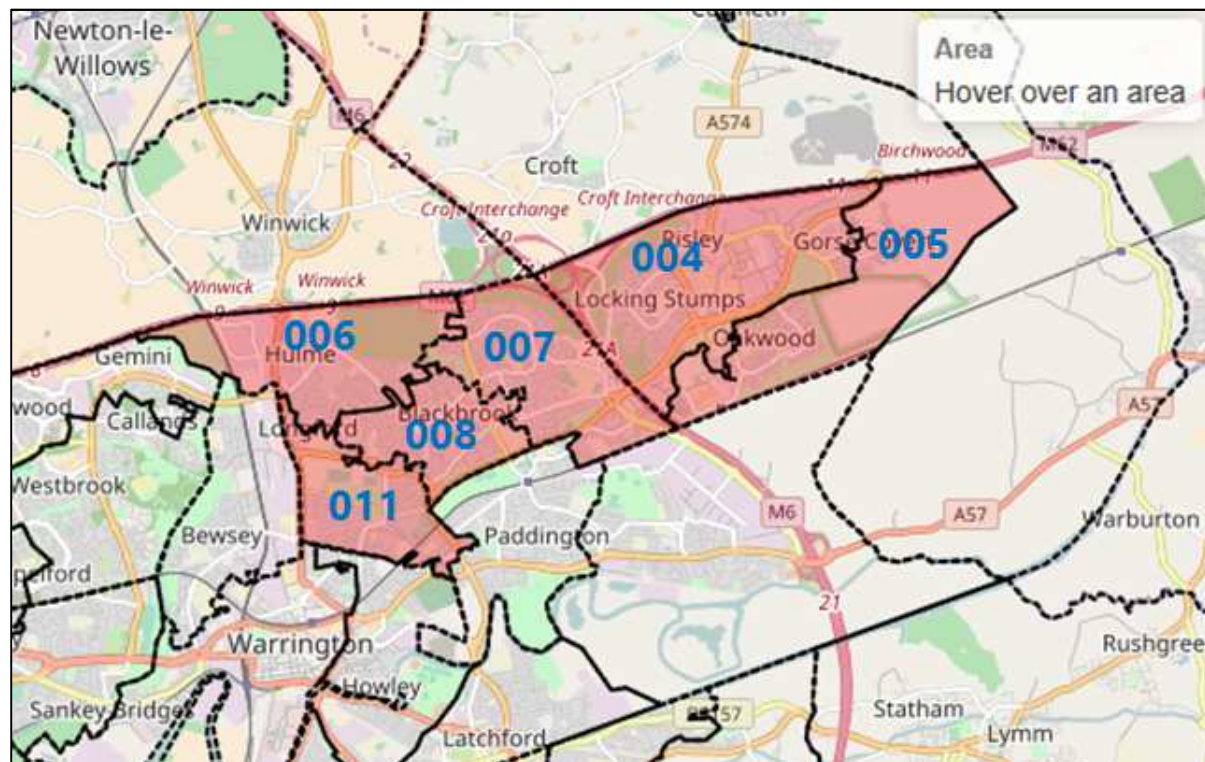
- 2.1 The TEMPRO database version 7.2 has been reviewed for the appropriate growth factors to apply to the 2015 base model flows to forecast traffic in the future years of 2025 and 2030.
- 2.2 TEMPRO version 7 uses census 2011 Super Output Areas (mid layer) data. The Peel Hall site is located in the Hulme area, as indicated in **Figure 2.1** below, which is Warrington 006 (E02002595), see below.

Figure 2.1 – Census 2011 Data, Warrington 006



- 2.3 The other areas classified by the census data that are covered within the area-wide modelling for the Peel Hall site are illustratively shown in **Figure 2.2** below for ease of reference.

Figure 2.2 – Census 2011 Data, Warrington Super Output Areas



2.4 The census reference numbers for the areas shown above are as follows:

- i. 007, E02002596
- ii. 004, E02002593
- iii. 005, E02002594
- iv. 008, E02002597
- v. 011, E02002600

2.5 Therefore the Warrington 006 are will be selected for calculating the growth rate for the Peel Hall assessments.

2.6 Using Urban Motorway roads to forecast 2025 and 2030 traffic growth the resultant growth factors are set out in **Table 2.1** below. The TEMPRO data is contained in **Appendix 1** for reference.

Table 2.1 – Growth rates

	AM	PM
2015-2025	1.1749	1.1652
2015-2030	1.2211	1.2098

2.7 For reference, the above growth rates are higher than any of the other areas also highlighted in **Figure 2.1** and **paragraph 2.4** above, as set out below for reference (for 2015-2030):

- i. Selecting 004 gives growth rates of AM 1.1921, PM 1.1798.
- ii. Selecting 005 gives growth rates of AM 1.1886, PM 1.1842.
- iii. Selecting 007 gives growth rates of AM 1.1693, PM 1.1536.
- iv. Selecting 008 gives growth rates of AM 1.2010, PM 1.1986.
- v. Selecting 011 gives growth rates of AM 1.1882, PM 1.1857.
- vi. Selecting Warrington (Authority) gives AM 1.1838, PM 1.1765.

2.8 Therefore it is considered that the use of the Warrington 006 growth rates are appropriate for the Peel Hall area-wide modelling.

Employment

2.9 As previously set out in Technical Note TN/07/Addendum on Traffic Growth (October 2016) and agreed with highway officers, two of the employment sites identified as committed developments; Calver Park (ref: 2015/26685 and 2013/22533) and Birchwood Park (ref: 2015/26044, 214/23358 and 2008/12744), are included in the Local Plan.

2.10 Therefore it can reasonably be assumed that an estimation of the volume of trips these developments would generate will have been provided by Warrington and feed into TEMPRO, and as such these committed developments have not been added again in the future years.

2.11 Furthermore, highway officers have confirmed that the Winwick B&Q proposals can be excluded from the list of committed developments as it is agreed that any additional traffic is insignificant.

2.12 In summary, the committed developments added to the Peel Hall modelling can be summarised as follows:

- i. Land at Benson Road, Birchwood (ref: 2015/26220).
- ii. Birchwood Shopping Centre (ref: 2015/25880).

Appendix 1

TEMPRO Screen Capture

2015-2025

Warrington 006 – AM Peak Hour

NTM Traffic Growth Calculators

Select data type:

- ☒ Growth factors
- ☐ Future year minus base year
- ☐ Base year data
- ☐ Future year data

*Italicized results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Trip end type:

- ☐ Production/Attraction
- ☒ Origin/Destination

Area Description

Level	Name	Origin	Destination
Authority	Warrington	1.0558	1.0889
E020022995	Warrington 006	1.1	1.1

Results

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

- ☒ Warrington
- ☒ Warrington 006 (E020022995)

3: Select area type:

- ☒ Urban
- ☐ Rural
- ☐ All

4: Select road type:

- ☒ Motorway
- ☐ Trunk
- ☐ Principal
- ☐ Minor
- ☐ All

5: Select which area it serves:

- ☒ Region
- ☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
Authority	Warrington	1.1453
E020022995	Warrington 006	1.1749

TEMPPro main form

Data selections

Trip end selections

Trip end by time period selections

Select time period:

Weekday PM peak period (1600 - 1859)

Trip end type

Production/Attraction

Origin/Destination

Reset Selections

Select data type

Growth factors

Future year minus base year

Base year data

Future year data

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver

Combined Modes

Area Description

Level

Name

Authority

Warrington

Warrington 006

Origin

1.0775

1.0915

Destination

1.0547

1.0904

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description

From

To

NTM AF15 Dataset

2010

2040

NTM AF09 Dataset

2003

2035

NTM AF08 Dataset

2003

2025

2: Select Areas to make up the geographic region:

Warrington

Warrington 006 (E02002595)

3: Select area type:

Urban

Rural

All

4: Select road type:

Motorway

Trunk

Principal

Minor

All

5: Select which area it serves:

Region

England

Calculate the adjusted local growth figure

Results

Level

Area

Local Growth Figure

Authority

Warrington

1.1367

E02002595

Warrington 006

1.1652

1107 Peel Hall
TEMPRO 7.2
2015-2025

AM Peak Hour – displaying years of 2015-2025

Select dataset version: 72

Result type

Trip ends by time period

Trip ends by car availability

Car ownership data

Planning data

Set area definition...

Enter base year 2015

Enter future year 2025

Trip end selections

Trip end by time period selections

Reset Selections

Select data type

Growth factors

Future year minus base year

Base year data

Future year data

*Thalised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver

Combined Modes

Area Description	Name	Origin	Destination
Level	Warrington	1.0558	1.0895
Authority	Warrington 006	1.1	1.1

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF 15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

Warrington

Warrington 006 (E02002595)

3: Select area type:

Urban

Rural

All

4: Select road type:

Motorway

Trunk

Principal

Minor

All

5: Select which area it serves:

Region

England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
Authority	Warrington	1.1453
Authority	Warrington 006	1.1749

1107 Peel Hall
TEMPro 7.2
2015-2030

Motorway Growth

Warrington 006 – AM Peak Hour

TEMPro main form

Data selections

Trip end selections

Trip end by time period selections

Select time period:

Weekday AM peak period (0700 - 0959)

Trip end type

Production/Attraction

Origin/Destination

Reset Selections

Select data type

Growth factors

Future year minus base year

Base year data

Future year data

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Results

Area Description	Name	Origin	Destination
Level	Warrington	1.0772	1.1214
Authority	Warrington 006	1.1246	1.1232

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

☒ Warrington

☒ Warrington 006 (E02002595)

3: Select area type:

☒ Urban

☐ Rural

☐ All

4: Select road type:

☒ Motorway

☐ Trunk

☐ Principal

☐ Minor

☐ All

5: Select which area it serves:

☒ Region

☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
Authority	Warrington	1.1838
E02002595	Warrington 006	1.2211

Warrington 006 – PM Peak Hour

TEMPro main form

Data selections

Trip end selections

Trip end by time period selections

Select time period:

Weekday PM peak period (1600 - 1855)

Trip end type

Production/Attraction

Origin/Destination

Reset Selections

Select data type

Growth factors

Future year minus base year

Base year data

Future year data

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Results

Area Description	Name	Origin	Destination
Level	Warrington	1.1075	1.0775
Authority	Warrington 006	1.1235	1.1234

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

☒ Warrington

☒ Warrington 006 (E02002595)

3: Select area type:

☒ Urban

☐ Rural

☐ All

4: Select road type:

☒ Motorway

☐ Trunk

☐ Principal

☐ Minor

☐ All

5: Select which area it serves:

☒ Region

☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
Authority	Warrington	1.1765
E02002595	Warrington 006	1.2098

AM Peak Hour – displaying years of 2015-2030

Data selections

Data selection version: 72

Select data type

- ☒ Growth factors
- ☐ Future year minus base year
- ☐ Base year data
- ☐ Future year data

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes		All Purposes	
Level	Name	Origin	Destination
Authority	Warrington	1.0772	1.1214
E02002595	Warrington 006	1.1246	1.1202

Enter base year: 2015
Enter future year: 2030

Trip end selections: Trip ends by time period
Trip end by time period selections: Car ownership data, Planning data

Reset Selections

Results

NTM Traffic Growth Calculations

- Select NTM Dataset:**

NTM Dataset Description	From	To
+ NTM AP 15 Dataset	2010	2040
- NTM AF09 Dataset	2003	2035
- NTM AF08 Dataset	2003	2025
- Select Areas to make up the geographic region:**
 - ☒ Warrington
 - ☒ Warrington 006 (E02002595)
- Select area type:**
 - ☒ Urban
 - ☐ Rural
 - ☐ All
- Select road type:**
 - ☒ Motorway
 - ☐ Trunk
 - ☐ Principal
 - ☐ Minor
 - ☐ All
- Select which area it serves:**
 - ☒ Region
 - ☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
Authority	Warrington	1.1838
E02002595	Warrington 006	1.2211