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TECHNICAL NOTE

Project Name:	Travis Perkins, Wrexham
Client:	Travis Perkins Property Company Ltd
Job No:	24-0378
TN Status / No:	Final Issue 02
Date:	March 2025
Prepared By:	Ben Bastock
Checked By:	Chris Elliott
Approved By:	Chris Elliott
Subject:	Response to Highway Comments

1. Introduction

1.1 Rappor Consultants Ltd. (Rappor) has been instructed by Travis Perkins Property Company Ltd to provide highways and transport advice in support of a planning application for the change of use from a car dealership (sui generis) to a builders' merchant (sui generis) with the refurbishment of the existing building and a new storage building measuring at 607 square metres (sq.m.) (combined GEA of 1,915sq.m) at the former Dickens Car Dealership, Croesfoel Industrial Estate, Wrexham.

1.2 The application site comprises approximately 1.011 hectares of land, currently occupied by two vacant units, a large main building and a smaller building. As well as this there are two yard areas, which for the purposes of this report are named the lower and upper tier yard. The site was formerly occupied by the Dickens car dealership which was involved with the sale of new and used cars and included a servicing and MOT centre together with a vehicle repair shop. The dealership was open between 8.30am and 5.30pm Monday to Friday and between 9am and 12.30pm on a Saturday.

1.3 The proposals include a new storage building on the upper tier yard to the north east of the existing main building.

1.4 A planning application was submitted to Wrexham County Borough Council (WCBC) in November 2024 (planning ref: P/2024/1567). This planning application was accompanied by a Transport Statement (TS) and Travel Plan (TP) prepared by Rappor.

1.5 Following submission of the planning application, a highways consultation response was provided on 20 January 2025 from highways officers at WCBC. A copy of the full consultation response is provided at **Appendix A**. This response set out a number of comments relating to the following matters:

i. Parking & Turning Provision;
ii. Traffic Generation
iii. Service Delivery Management Plan (SDMP)
iv. Refuse Collection / Recycling
v. Construction Traffic Management Plan (CTMP)

1.6 This Technical Note provides a response to the comments raised by WCBC highways officers, including additional and/or amended information as required. For ease of reference, the headings used in the highways consultation response have also been used here.

2. Response to WCBC Highways Comments

2.1 For each matter, the WCBC comment is reproduced in bold italics followed by the Rappor response.

Parking & Turning Provision

It is understood that the proposed development comes under a sui generis class use which does not have any specified parking standards. It is therefore difficult to establish what level of parking provision is appropriate for the proposed development in this instance. The LHA would therefore request a parking accumulation survey or previous parking survey data from other Travis Perkins sites of comparable size and location for comparison purposes. The LHA await the requested information.

The proposed parking provision indicated on the submitted plan only indicates 2 no. spaces to mobility standards. LPGN 16 requires a minimum of 10% provision. The LHA recommend the applicant addresses this issue on a revised layout plan.

2.2 A parking accumulation exercise has been undertaken based on a survey undertaken at the existing Travis Perkins store in Chester. This survey was agreed in advance with highways officers at WCBC. Further detail is provided below.

2.3 It is understood that the policy requirement for disabled car parking should be applied to staff and customer car parking only, and not to van / HGV parking within the site. On the basis of 32 car parking spaces, provision of 10% disabled parking spaces would equate to a requirement for 4 spaces (rounded up). A revised site layout plan including 4 disabled spaces is provided at **Appendix B.**

Adequate turning facilities must be provided within the curtilage of the site to accommodate the anticipated vehicle types / sizes visiting the site.

Appropriate swept path details have been submitted which indicate the turning movements of a large car, 7.35m long van & 16.5m articulated HGV. However, it would be anticipated that 10 – 12m (approx.) rigid HGVs would also visit the site to deliver such items as aggregates. The LHA recommend the applicant clarifies this detail and provides appropriate swept path details for such a vehicle entering, parking, turning & exiting the site.

2.4 It is confirmed that rigid HGVs of up to 12m in length would also serve the site. Swept path analysis of a 12m rigid HGV, entering, exiting and turning within the site is shown in the Rappor drawing at **Appendix C**. This demonstrates that rigid vehicles can satisfactorily serve the site alongside 16.5m articulated HGVs.

Active Travel

The LHA recommend that the applicant liaises with our Strategic Transport Manager in respect of any specific requirements for the proposed development that may be required under the Active Travel Act Guidance / LPGN 16 eg / cycle parking / shelters

2.5 Rappor has sought to contact the Strategic Transport Manager however at the time of writing no response has been received. Notwithstanding this, given the proposed development represents reuse of an existing site within an established industrial estate location, it is considered that there is no requirement to provide active travel improvements in order to make the development acceptable.

2.6 The site layout plan indicates provision of cycle parking within the site, which would be available to staff and customers. If further details of this cycle parking are required, these can be secured via an appropriately worded planning condition.

Travel Plan

A Travel Plan has been submitted with this application which has been forwarded to our Strategic Transport Manager for review and comments including any specific requirements for the proposed development that may be required under the Active Travel Act Guidance / LPGN 16 eg / cycle parking / shelters. The LHA will forward any comments once they are received.

2.7 As per the above, no comments have been received from the Strategic Transport Manager. The submitted Travel Plan contains appropriate measures to encourage sustainable travel at the site given the nature of the use proposed. The requirement to implement a detailed Travel Plan can be secured via a planning condition. This would require submission and approval of the Travel Plan prior to occupation of the site.

Traffic Generation

TRICS Data- Garage Sites

The submitted data only includes 3 no. sites ranging in gross floor areas of 5600 – 13051m2 The application form indicates an existing gross floor area of 1257m2 for the existing garage buildings which is significantly less than the category selected. The LHA recommend that at least 6 sites are selected for review and includes sites of comparable areas. The location categories for the selected sites include2 no. edge of town centre and 1 no. suburban zone. The LHA consider the existing site to be in an edge of town location. The LHA recommend that any review includes sites of comparable locations ie/ edge of town. TRICS survey data must be no more than 8 years old. The submitted data exceeds this criteria.

2.8 A review of the TRICS database has been undertaken. Car showroom sites within edge of town locations only have been selected as requested. These sites were then also filtered to include sites with vehicle repair services and sites of no more than eight years old as requested.

2.9 Based on these search criteria, there are only four suitable car showroom sites within TRICS. Whilst the comments suggest that at least six sites should be selected, this is not possible without widening the locational and/or age of surveys as was presented in the TS.

2.10 A comparison of trip rates and resulting trip generation originally presented in the TS (which are based on six TRICS sites) and those derived from the revised parameters set out above is presented in **Table 3.1**. The revised TRICS output is provided at **Appendix D.**

	Time Period	Trip Rates per 100sq.m			Trip Generation (1,338sq.m)		
		Arrivals	Departures	Total	Arrivals	Departures	Total
Submitted TA Trip Rates	AM Peak (08:00-09:00)	0.977	0.347	1.324	13	5	18
	PM Peak (17:00-18:00)	0.266	0.735	1.001	4	10	13
	Total Daily Trips (07:00-19:00)	6.138	6.15	12.288	82	82	164
Revised Trip Rates	AM Peak (08:00-09:00)	0.701	0.211	0.912	9	3	12
	PM Peak (17:00-18:00)	0.234	0.489	0.723	3	7	10
	Total Daily Trips (07:00-19:00)	4.364	4.32	8.684	58	58	116

Table 3.1 Car Showroom Vehicle Trip Generation

2.11 **Table 3.1** indicates that using revised filtering criteria within TRICS as requested within the highways comments, the forecast trip generation associated with the existing site use is lower than originally presented in the TS. The existing use is forecast to attract 12 and 10 trips during the AM and PM peaks respectively . Between 7am and 7pm the site has the potential to generate a total of 116 two-way trips.

TRICS Data- Builder Centre Sites

The submitted data includes 6 no. sites ranging in gross floor areas of 282 – 4660m2 The application form indicates a proposed floor area of 1839m2 for the proposed builders. This conflicts with the data provided on the submitted layout plan (Drg. No. 9003-MJM-XX-XX-DR D-6611 Rev P04) indicating a proposed gross floor area of 1915m2. The LHA recommend that this issue is addressed and at least 6 sites are selected for review and includes sites of comparable areas.

The selected sites only include 2 no. edge of town location sites, the remainder being either suburban or neighbourhood centre sites. The LHA consider the existing / proposed site to be in an edge of town location. The LHA recommend that any review includes sites of comparable locations ie/ edge of town. TRICS survey data must be no more than 8 years old. The submitted data exceeds this criteria.

Details of the previous type / size of vehicle eg/ cars, vans, HGVs visiting the site will need to be clarified / provided along with typical daily vehicle movements.

Details of the proposed type / size of vehicle eg/ cars, vans, HGVs visiting the site will need to be clarified / provided along with typical daily vehicle movements.

The LHA recommend that details of other similar Travers Perkins Sites are reviewed in respect of the number and type of vehicles (size) that visit the site on a daily basis. The LHA recommend that details of the previous number and type of vehicles (size) that visited the site on a daily basis are provided. The LHA recommend that current / previous vehicle movements are compared to highlight any significant differences in the size and frequency of specific vehicle movements at the site.

2.12 The TRICS database does not contain the suggested number of sites in the requested locations that are within eight years of age. It should be noted that the Applicant has submitted a significant number of planning applications for similar development proposals across the UK, which have been supported by trip generation forecasts using similar TRICS data. The proposed use generates a limited quantum of vehicle movements, particularly during peak periods such that it would not have a significant effect on the local highway network. When the existing use of the site is then taken into

account, the number of vehicle movements is further reduced such that again, there will be no advise impact on the local highway network.

2.13 Notwithstanding the above, to respond to these comments, a traffic survey has been undertaken at the existing Travis Perkins store in Chester. The details of this traffic survey were agreed in advance with the highways officer at WCBC. The results of the traffic surveys and resulting trip generation forecasts are set out in Section Three below.

Service Delivery Management Plan (SDMP)

If the proposed development is considered to have significantly more deliveries than previously experienced at the site and is supported, it may be considered appropriate to include a condition requiring the submission of a Service Delivery Management Plan (SDMP) prior to commencement, which details how the business will operate in respect of delivery vehicles, details of how HGV deliveries will be staggered throughout the day etc. to avoid any parking of vehicles on the highway and any conflict of vehicle movements at the access or within the site ie/ limit the site to only 1 no. HGV delivery on site at any one time and coordinated".

2.14 The site layout contains sufficient parking for HGVs, with swept path analysis demonstrating that all vehicles are able to enter and exit the site in forward gear. As such, there would be no adverse impact on the local highway network with no requirement to park HGVs on the highway. There is no requirement to limit the number of HGVs on site. Given this, there is no requirement for an SDMP in order to make the development acceptable.

Refuse Collection / Recycling

The LHA recommend that you consult with our Senior Waste Strategy Officer to discuss the above detail and the adequacy of any area allocated to waste collection. However, it is assumed that the proposed business will be serviced by a private contractor.

2.15 The proposed development would be serviced by a private refuse collector as suggested. The Applicant is experienced in operating similar sites across the UK and as such understands the requirements for refuse storage and collection. It has been demonstrated that HGVs can satisfactorily enter and exit the site and so refuse collection vehicles would also be able to satisfactorily serve the site.

2.16 On this basis, the arrangements for refuse storage and collection are adequate for the proposed use.

Construction Traffic Management Plan (CTMP)

If an application for development is supported at the site, the LHA recommend any permission includes the following condition:- No part of the development shall commence until a Construction Traffic Management Plan including provisions for contractor parking has been submitted to and approved in writing by the Local Planning Authority and the plan as is approved has been fully implemented.

2.17 The Applicant is willing to accept the suggested condition requiring submission of a CTMP prior to commencement of development.

3. Revised Trip Generation

3.1 As set out above, it has been agreed with WCBC that a traffic survey at the existing Travis Perkins store in Chester would be undertaken to review trip generation and parking.

3.2 The traffic survey was undertaken during w/c 10th February 2025, with surveys being undertaken on the Tuesday, Thursday and Saturday of that week. Surveys were undertaken from 07:00-19:00. All vehicle movements were recorded and classified into cycles, cars, LGVs and HGVs. Pedestrian movement were also recorded. A summary of the observed movements and trip rates derived from these surveys is presented in **Table 3.1**. The raw survey data at the Chester store is provided at **Appendix E**.

3.3 It should be noted that approximately 30% of all movements in and out of the site were recorded as pedestrians. From a review of the survey data and video footage, it has been observed that due to the limited on-site parking and availability of on-street parking, many customers were observed parking on-street and then entering and exiting the site on foot. As such, in order to provide a robust estimate of trip generation, all pedestrian movements in and out of the site have been assumed to arrive in individual vehicles.

3.4 This approach will ensure a robust assessment, since a small proportion of pedestrian trips may not have used a vehicle to access the site.

Time Period	Chester Survey Movements (1.02 ha)			Trip Rates per 1 ha		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Weekday AM Peak (08:00-09:00)	20	22	42	19.12	21.57	40.69
Weekday PM Peak (17:00-18:00)	1	3	4	0.49	2.45	2.94
Total Weekday Daily Trips (07:00-19:00)	148	148	296	145.10	144.61	289.71

Table 3.1: Chester Store Vehicle Movements and Resulting Trip Rates (per ha)

3.5 The trip rates presented in Table 3.1 are based on the site area, rather than building floor area. Whilst building floor area was used in the TS, this was due to TRICS not providing an option to use site area for the purposes of forecasting trip generation.

3.6 From a review of the Chester site, it has a larger site area than the proposed Wrexham store, however a significantly smaller building area. The main driver for trip generation at a Builder's Merchants store will be availability of products / stock. At the Chester site, there is a large yard area which is used to store products. At the proposed Wrexham store, whilst the larger building area will allow more products and stock to be stored under cover, the same level of products can still be stored at the site.

3.7 As such, trip rates based on the traffic survey at Chester have been calculated based on the site area as this is considered a more accurate approach.

3.8 Application of the above trip rates to the proposed Wrexham store site area results in the forecast trip generation set out in **Table 3.2**

Time Period	Trip Rates per 1 ha			Trip Generation (1.011 ha)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
AM Peak (08:00-09:00)	19.12	21.57	40.69	19	22	41
PM Peak (17:00-18:00)	0.49	2.45	2.94	0	2	3
Total Daily Trips (07:00-19:00)	145.10	144.61	289.71	147	146	293

Table 3.2: Forecast Trip Generation at Wrexham Store

3.9 **Table 3.3** indicates that the proposed development is forecast to attract 41 and 3 trips during the AM and PM peaks respectively. Between 7am and 7pm the site has the potential to generate a total of 293 two-way trips.

3.10 A comparison of the trip generation presented in the TS, which was based on TRICS trip rates, and the trip generation based on the Chester surveys is presented in **Table 3.3** below.

	Time Period	Net Trip Impact		
		Arrivals	Departures	Total
TS Trip Generation based on TRICS	AM Peak	12	9	21
	PM Peak	2	4	6
	Daily	115	118	233
Revised Trip Generation based on Chester store survey	AM Peak	19	22	41
	PM Peak	0	2	3
	Daily	147	146	293

Table 3.3: Trip Generation Comparison

3.11 **Table 3.3** indicates that use of the Chester store survey data results in a higher forecast trip generation. In the AM peak, 20 additional vehicle movements are forecast. During the PM peak, slightly fewer vehicle movements are forecast. Across the total day, an additional 60 vehicle movements are forecast.

3.12 In order to consider the overall net trip impact of the development proposals on the local highway network, a comparison of the existing and forecast trips, set out above, is provided in **Table 3.4**.

3.13 For the previous car showroom use, the revised trip rates presented in Section Two above have been used.

	Time Period	Net Trip Impact		
		Arrivals	Departures	Total
Car Showroom Use	AM Peak	9	3	12
	PM Peak	3	7	10
	Daily	58	58	116
Proposed Development- based on Chester store surveys	AM Peak	19	22	41
	PM Peak	0	2	3
	Daily	147	146	293
Net Impact	**AM Peak**	+10	+19	+29
	PM Peak	-3	-5	-7
	Daily	+89	+88	+177

Table 3.4: Net Trip Impact Assessment

3.14 **Table 3.4** indicates that the proposed development is forecast to result in an additional 29 vehicle movements at the site during the AM peak. At less than one additional vehicle movement every two minutes on average across this peak hour, this will not result in any adverse effect on the local highway network.

3.15 During the PM peak, a reduction in vehicle movements at the site is forecast, whilst across the total day, an additional 177 vehicle movements are forecast. At an average of 14-15 vehicle movements per hour, again this will not have an adverse impact on the operation of the highway network.

3.16 As set out above, the trip generation estimates presented are based on trip rates calculated using site area, as this is considered the most appropriate approach given

the availability of products / stock at the store will be more influenced by the overall site area than the building floor area. Whilst this is considered the most appropriate approach, notwithstanding this, alternative trip generation forecasts are presented below based on trip rates calculated using building floor area.

3.17 The recorded vehicle movements from the Chester store and resulting trip rates per 100sqm GFA are presented in **Table 3.5.**

Time Period	Chester Survey Movements (1,117 sq.m)			Trip Rates per 100sqm		
	Arrivals	Departures	Total	Arrivals	Departures	Total
AM Peak (08:00-09:00)	20	22	42	1.746	1.970	3.716
PM Peak (17:00-18:00)	1	3	3	0.045	0.224	0.269
Total Daily Trips (07:00-19:00)	148	148	296	13.3	13.2	26.5

Table 3.5: Chester Store Vehicle Movements and Resulting Trip Rates (per 100 sqm)

3.18 Application of these trip rates to the proposed Wrexham store results in the forecast trip generation as presented in **Table 3.6.**

Time Period	Trip Rates per 100sqm			Trip Generation 1915sqm		
	Arrivals	Departures	Total	Arrivals	Departures	Total
AM Peak (08:00-09:00)	1.746	1.970	3.715	33	38	71
PM Peak (17:00-18:00)	0.045	0.224	0.269	1	4	5
Total Daily Trips (07:00-19:00)	13.25	13.21	26.45	254	253	507

Table 3.6 Forecast Trip Generation at Wrexham Store Based on Trip Rates per 100sqm

3.19 **Table 3.6** indicates that using this approach, the proposed Wrexham store is forecast to attract 71 and 5 trips during the AM and PM peaks respectively. Between 7am and 7pm the site has the potential to generate a total of 507 two-way trips. These vehicle trip forecasts are considered to represent a sigficiant over-estimate of the likely trip generation at the proposed development.

3.20 The net trip impact against the existing site use is presented in **Table 3.7** below.

Use Type	Time Period	Net Vehicle Trips		
		Arrivals	Departures	Total
Car Showroom Use	AM Peak	9	3	12
	PM Peak	3	7	10
	Daily	58	58	116
Proposed Development- based on Chester store surveys	AM Peak	33	38	71
	PM Peak	1	4	5
	Daily	254	253	507
Net Impact	**AM Peak**	**+24**	**+35**	**+59**
	PM Peak	**-2**	**-3**	**-5**
	Daily	**+196**	**+195**	**+391**

Table 3.7 Net Trip Impact Assessment Existing use and Proposed Store (Floor Area)

3.21 **Table 3.7** indicates that using this methodology, the proposed development is forecast to result in an additional 59 vehicle movements at the site during the AM peak. At less than one additional vehicle movement every minute on average across this peak hour, again, this will not result in any adverse effect on the local highway network.

3.22 During the PM peak, a reduction in vehicle movements at the site is again forecast, whilst across the total day, an additional 391 vehicle movements are forecast.

Parking Demand

3.23 To demonstrate that the proposed level of parking is sufficient to ensure all demand for parking can be accommodated on-site, a parking accumulation exercise has been undertaken. This is again based on the surveys undertaken at the Chester store as requested by WCBC.

3.24 The full parking accumulation calculations are provided at **Appendix F** and indicate that the maximum demand for car parking will be on a weekday between 08:00-09:00 when a total of 14 parked vehicles (excluding HGV's) are forecast. With a total of 32 parking spaces provided, this is sufficient to ensure that all forecast demand for car parking can be accommodated on-site.

3.25 Additionally, a maximum of three HGV's are expected on the site at all times, which can be accommodated within the dedicated HGV loading area within the site.

3.26 This demonstrates that the parking provision is appropriate for the operational needs of the development and will ensure that all vehicle parking can be undertaken within the

site. As such, there will be no adverse impact on the operation of the local highway network.

4. Summary and Conclusions

4.1 This Technical Note is provided in response to the highways consultation response from WCBC to the planning application for the change of use from a car dealership (sui generis) to a builders' merchant (sui generis) with the refurbishment of the existing building and a new storage building measuring at 607 square metres (sq.m.) (combined GEA of 1,915sq.m) at the former Dickens Car Dealership, Croesfoel Industrial Estate, Wrexham.

4.2 This Technical Note has demonstrated the following:

i. The revised site layout includes disabled parking in accordance with WCBC parking standards.
ii. There is no requirement for active travel improvements to make the proposed development acceptable. If more detailed information regarding cycle parking is required, this can be secured via planning condition.
iii. The submitted Travel Plan is sufficient to support the proposed development. The requirement for a full Travel Plan can be secured via planning condition.
iv. The TRICS database does not contain the number of car showroom sites suggested by WCBC within the specified parameters. Revised trip generation forecasts for the existing use have been provided.
v. Revised trip generation forecasts have been presented for the proposed use based on agreed surveys undertaken at the Travis Perkins Chester store. These demonstrate that the proposed development will not have an adverse impact on the operation of the highway network when compared with the existing use.
vi. There is no requirement for a SDMP to be implemented at the site to make the development acceptable.
vii. The Applicant is willing to accept a planning condition requiring submission and approval of a CTMP prior to commencement of development.
viii. The quantum of parking proposed is sufficient to ensure that all forecast demand for parking can be accommodated within the site.

4.3 It can be concluded that this Technical Note has provided sufficient additional information to satisfactorily address the highways comments received from WCBC and that it has again been demonstrated that the proposed development will not have an unacceptable impact on the safety or operation of the surrounding local highway network. As such, there are no significant highways and transportation matters that would preclude WCBC from approving this planning application.

Appendix A- Highway Consultation Response

MEMORANDUM

From:	Chief Officer, Environment & Technical	**To:**	Chief Officer Economy & Planning
		FAO::	Emma Bailey
Our Ref:	ET/DC/P/2024/1567	**Your Ref:**	P/2024/1567
Date:	20/01/2025		

TOWN AND COUNTRY PLANNING ACT 1990

PROPOSAL: NEWID DEFNYDD TIR AC ADEILADAU O SUI GENERIS (SIOP GWERTHU CEIR) I DDOSBARTH B8/SUI GENERIS (MASNACHWR ADEILADU) YN CYNNWYS ARDDANGOSFA TU ALLAN A RHESELI STORIO A CHODI 1 ADEILAD / CHANGE OF USE OF LAND AND BUILDINGS FROM SUI GENERIS (CAR DEALERSHIP) TO CLASS B8/SUI GENERIS (BUILDERS MERCHANT) INCLUDING OUTSIDE DISPLAY AND STORAGE RACKING AND ERECTION OF 1 NO BUILDING

LOCATION: DICKENS GARAGE, CROESFOEL INDUSTRIAL ESTATE, RHOSTYLLEN, WREXHAM, LL14 4EJ

I refer to your consultation / email dated 20/11/2024 in respect of the above.

General

The development site comprises the proposed change of use from a car dealership (sui generis) to a builders' merchant (sui generis) with the refurbishment of the existing building and a new storage building measuring at 607 square metres (sq.m.) at the former Dickens Car Dealership, Croesfoel Industrial Estate, Wrexham.

The site comprises the following:-

Building	GFA (m^2)	Proposed Use
1 - Existing	1095	Showroom/sales/warehouse/offices/staff facilities
2 - Existing	213	Sales / Warehouse
3 - Proposed	607	Warehouse

Access

The proposed development site is located on Croesfoel Industrial Estate which is an unclassified road (cul de sac) subject to a 20mph speed limit.

Based on typical speeds of 20mph, any proposed / existing access would require visibility splays of 2.4 x 25m in both directions measured to the nearside edge of the adjoining highway. Visibility from

the existing access serving the development site is adequate providing splays in excess of the above requirements.

The existing access is 6.7m wide with 6m radii and is gated at 10.8m behind the edge of carriageway. The access is hard paved and slopes towards the highway.

It is understood that the site was previously occupied by a car sales business including associated servicing / mot centre and would have accommodated a significant number of vehicle movements by cars, trucks and potentially car transporters.

It is understood that the existing access will be utilised to accommodate access by HGVs for deliveries and access to staff / customer parking.

Parking & Turning Provision

Although a significant portion of the unclassified estate road is subject to a TRO (double yellow lines), there is already typically high demand for the remaining on-street spaces by vehicles assumed to be from neighboring businesses. In terms of parking provision, the Local Highway Authority (LHA) would recommend that maximum LPGN 16 standards are provided within the curtilage of the site.

The submitted site layout plan (Drg. No. 9003-MJM-XX-XX-DR-D-6611 Rev P04) indicates the provision of the following:-

Spaces	**Qty**
Pickup / collection	11
Customer Parking	15
Staff Parking	17
HGV Parking / Deliveries	5

It is understood that the proposed development comes under a *sui generis* class use which does not have any specified parking standards. It is therefore difficult to establish what level of parking provision is appropriate for the proposed development in this instance. **The LHA would therefore request a parking accumulation survey or previous parking survey data from other Travis Perkins sites of comparable size and location for comparison purposes. The LHA await the requested information.**

The proposed parking provision indicated on the submitted plan only indicates 2 no. spaces to mobility standards. LPGN 16 requires a minimum of 10% provision. **The LHA recommend the applicant addresses this issue on a revised layout plan.**

Adequate turning facilities must be provided within the curtilage of the site to accommodate the anticipated vehicle types / sizes visiting the site.

Swept Path Details

Appropriate swept path details have been submitted which indicate the turning movements of a large car, 7.35m long van & 16.5m articulated HGV. However, it would be anticipated that10 – 12m (approx.) rigid HGVs would also visit the site to deliver such items as aggregates. **The LHA recommend the applicant clarifies this detail and provides appropriate swept path details for such a vehicle entering, parking, turning & exiting the site.**

Active Travel

The LHA recommend that the applicant liaises with our Strategic Transport Manager – Gwen Thomas on Tel: 01978 729667 (or email: gwen.thomas@wrexham.gov.uk) in respect of any specific requirements for the proposed development that may be required under the Active Travel Act Guidance / LPGN 16 eg/ cycle parking / shelters. **Any such requirements once discussed / agreed will need to be referenced / indicated on a revised layout.**

Travel Plan

A Travel Plan has been submitted with this application which has been forwarded to our Strategic Transport Manager – Gwen Thomas on Tel: 01978 729667 (or email: gwen.thomas@wrexham.gov.uk) for review and comments including any specific requirements for the proposed development that may be required under the Active Travel Act Guidance / LPGN 16 eg/ cycle parking / shelters. The LHA will forward any comments once they are received.

Traffic Generation

The submitted Transport Statement includes TRICs data for both the existing use (garage site) and proposed use (builders merchants).

TRICs Data - Garage Sites

The submitted data only includes 3 no. sites ranging in gross floor areas of 5600 – 13051m^2
The application form indicates an existing gross floor area of 1257m^2 for the existing garage buildings which is significantly less than the category selected. **The LHA recommend that at least 6 sites are selected for review and includes sites of comparable areas.**

The location categories for the selected sites include2 no. edge of town centre and 1 no. suburban zone. The LHA consider the existing site to be in an edge of town location. **The LHA recommend that any review includes sites of comparable locations ie/ edge of town.**

TRICS survey data must be no more than 8 years old. **The submitted data exceeds this criteria.**

The LHA request the applicant submits further details to address the above.

TRICs Data - Builder Center Sites

The submitted data includes 6 no. sites ranging in gross floor areas of 282 – 4660m^2
The application form indicates a proposed floor area of 1839m^2 for the proposed builders.
This conflicts with the data provided on the submitted layout plan (Drg. No. 9003-MJM-XX-XX-DR-D-6611 Rev P04) indicating a proposed gross floor area of 1915m^2. **The LHA recommend that this issue is addressed and at least 6 sites are selected for review and includes sites of comparable areas.**

The selected sites only include 2 no. edge of town location sites, the remainder being either suburban or neighborhood centre sites. The LHA consider the existing / proposed site to be in an edge of town location. **The LHA recommend that any review includes sites of comparable locations ie/ edge of town.**

TRICS survey data must be no more than 8 years old. **The submitted data exceeds this criteria.**

The LHA request the applicant submits further details to address the above.

Details of the previous type / size of vehicle eg/ cars, vans, HGVs visiting the site will need to be clarified / provided along with typical daily vehicle movements.

Details of the proposed type / size of vehicle eg/ cars, vans, HGVs visiting the site will need to be clarified / provided along with typical daily vehicle movements.

The LHA recommend that details of other similar Travers Perkins Sites are reviewed in respect of the number and type of vehicles (size) that visit the site on a daily basis. The LHA recommend that details of the previous number and type of vehicles (size) that visited the site on a daily basis are provided. The LHA recommend that current / previous vehicle movements are compared to highlight any significant differences in the size and frequency of specific vehicle movements at the site. The above detail will need to be included in a revised Transport Statement.

Accident Data

The submitted Transport Statement indicates that a review of the most recent 5 year period in the location of Church Street and the Croesnewydd Rd Industrial Estate access road indicated that there were no recorderd collisions. However, a review of the Crashmap data between the A483 Croesfoel Interchange / Wrexham Rd junction and Church Street indicated 2 no. slight incidents and 1 no. serious incident occurring in the last 5 years. However, it is concluded that there are no significant highway safety concerns in the vicinity of the site that could be exacerbated by the proposed development.

Service Delivery Management Plan (SDMP)

If the proposed development is considered to have significantly more deliveries than previously experienced at the site and is supported, it may be considered appropriate to include a condition requiring the submission of a Service Delivery Management Plan (SDMP) prior to commencement, which details how the business will operate in respect of delivery vehicles, details of how HGV deliveries will be staggered throughout the day etc. to avoid any parking of vehicles on the highway and any conflict of vehicle movements at the access or within the site ie/ limit the site to only 1 no. HGV delivery on site at any one time and coordinated.

Refuse Collection / Recycling

The LHA recommend that you consult with our Senior Waste Strategy Officer Gabrielle Povey (Senior Waste Strategy Officer) on 01978 729640 to discuss the above detail and the adequacy of any area allocated to waste collection. However, it is assumed that the proposed business will be serviced by a private contractor.

Construction Traffic Management Plan (CTMP)

If an application for development is supported at the site, the LHA recommend any permission includes the following condition:-

No part of the development shall commence until a Construction Traffic Management Plan including provisions for contractor parking has been submitted to and approved in writing by the Local Planning Authority and the plan as is approved has been fully implemented.

In conclusion, the LHA request the following information:-

- **Parking Provision**
  It is understood that the proposed development comes under a *sui generis* class use which does not have any specified parking standards. It is therefore difficult to establish what level of parking provision is appropriate for the proposed development in this instance. **The LHA would therefore request a parking accumulation survey or previous parking survey data from other Travis Perkins sites of comparable size and location for comparison purposes. The LHA await the requested information.**

  The proposed parking provision indicated on the submitted plan only indicates 2 no. spaces to mobility standards. LPGN 16 requires a minimum of 10% provision. **The LHA recommend the applicant addresses this issue on a revised layout plan.**

- Swept Path Details

  Appropriate swept path details have been submitted which indicate the turning movements of a large car, 7.35m long van & 16.5m articulated HGV. However, it would be anticipated that a 10 – 12m (approx.) rigid HGV would also visit the site to deliver aggregates. **The LHA recommend the applicant clarifies this detail and provides appropriate swept path details for such a vehicle entering, parking, turning & exiting the site.**

- Active Travel

  The LHA recommend that the applicant liaises with our Strategic Transport Manager – Gwen Thomas on Tel: 01978 729667 (or email: gwen.thomas@wrexham.gov.uk) in respect of any specific requirements for the proposed development that may be required under the Active Travel Act Guidance / LPGN 16 eg/ cycle parking / shelters. **Any such requirements once discussed / agreed will need to be referenced / indicated on a revised layout.**

- **Traffic Generation**

  TRICs Data - Garage Sites

  The submitted data only includes 3 no. sites ranging in gross floor areas of 5600 – 13051m^2
  The application form indicates an existing gross floor area of 1257m^2 for the existing garage buildings of 1257m^2 which is significantly less than the category selected. **The LHA recommend that at least 6 sites are selected for review and includes sites of comparable areas.**

  The location categories for the selected sites include 2 no. edge of town centre and 1 no. suburban zone. The LHA consider the existing site to be in an edge of town location. **The LHA recommend that any review includes sites of comparable locations ie/ edge of town.**

  TRICS survey data must be no more than 8 years old. **The submitted data exceeds this criteria.**

  The LHA request the applicant submits further details to address the above.

  TRICs Data - Builder Center Sites

  The submitted data includes 6 no. sites ranging in gross floor areas of 282 – 4660m^2
  The application form indicates a proposed floor area of 1839m^2 for the proposed builders. This conflicts with the data provided on the submitted layout plan (Drg. No. 9003-MJM-XX-XX-DR-D-6611 Rev P04) indicating a proposed gross floor area of 1915m^2. **The LHA**

recommend that this issue is addressed and at least 6 sites are selected for review and includes sites of comparable areas.

The selected sites only include 2 no. edge of town location sites, the remainder being either suburban or neighbourhood centre sites. The LHA consider the existing / proposed site to be in an edge of town location. **The LHA recommend that any review includes sites of comparable locations ie/ edge of town.**

TRICS survey data must be no more than 8 years old. **The submitted data exceeds this criteria.**

The LHA request the applicant submits further details to address the above.

- Details of the previous type / size of vehicle eg/ cars, vans, HGVs visiting the site will need to be clarified / provided along with typical daily vehicle movements.

  Details of the proposed type / size of vehicle eg/ cars, vans, HGVs visiting the site will need to be clarified / provided along with typical daily vehicle movements.

  The LHA recommend that details of other similar Travers Perkins Sites are reviewed in respect of the number and type of vehicles (size) that visit the site on a daily basis. The LHA recommend that details of the previous number and type of vehicles (size) that visited the site on a daily basis are provided. The LHA recommend that current / previous vehicle movements are compared to highlight any significant differences in the size and frequency of specific vehicle movements at the site. This detail will need to be included in a revised Transport Statement.



On behalf of Chief Officer, Environment & Technical

Supplementary Notes

The applicant's attention should be drawn to item nos. 1, 2, 3, 4 & 5 of the supplementary notes.

Appendix

Highways Development Control Standard Advisory Note

In the interests of maintaining highway safety, and to avoid obstruction of the public highway (in contravention of the Highways Act), The Applicant is advised to coordinate with the highway authority at highwayroadworks@wrexham.gov.uk in advance of commencement of the development/works with respect to:

1. *Skip, scaffolding, hoarding or A frame/signage (Permit required for these items, if on the public highway);*
2. *Use of a parking space for a set down/delivery area;*

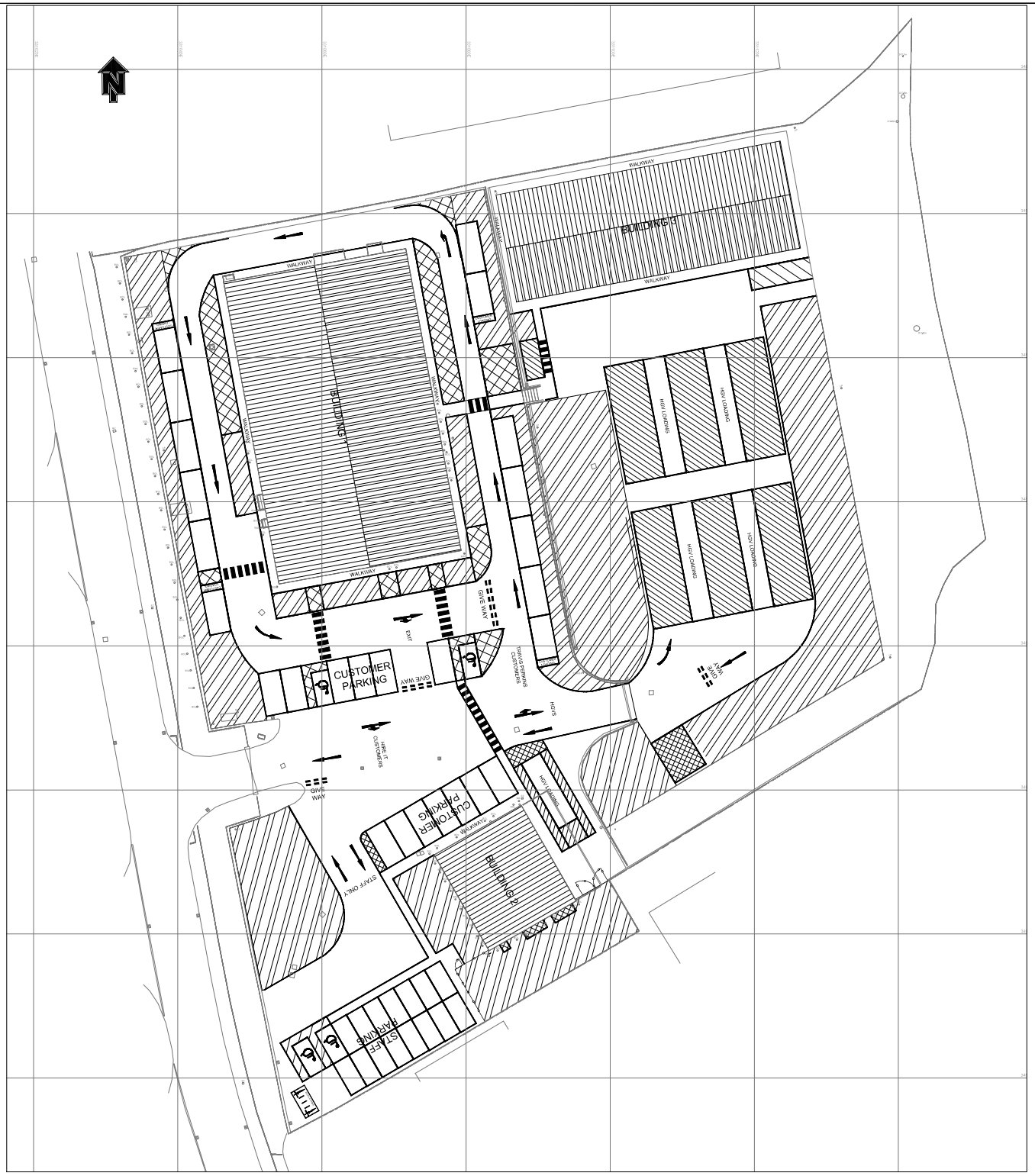
3. *Record a dilapidation survey of the adjacent carriageway prior to commencement (to avoid being ask to repair damage by the Applicant whilst carrying out their works);*
4. *If any lane closure or obstruction of the highway is required for a crane or similar;*
5. *Protection against dust and debris blowing onto the public highway*
6. *Construction traffic parking locally avoiding nuisance to others;*
7. *If the Applicant's scope of work includes new apparatus in the highway, such as new mains services then a Section 50 licence will be required. Insurances and demonstration of competency to carry out works in the public highway will be required.*
8. *Lowering of kerbs or minor pavement alterations require Section 184 agreement. Insurances and demonstration of competency to carry out works in the public highway will be required.*
9. *A section 278 agreement works agreement is required for more significant alterations to the existing highway*
10. *Any temporary works affecting traffic lights, [pedestrian/cycle road crossings, or bus stops require pre-planning and permits;*
11. *For applications with a private driveway (either existing or proposed) connecting onto the public highway, the following conditions of approval apply:*

    - *No surface water from the applicants site should be allowed to drain onto the public highway,*
    - *The first 5m* minimum (for residential property) should be hard paved, avoiding gravel or loose chippings form spreading.*
    - *No gate should be built in a location where it would result in a car obstructing the highway whilst being unlocked, and it should not swing out and over a pavement or any other part of the highway.*

    **The hard paved length and set back if required is subject to the applicants proposed vehicular length*

The applicants should allow a minimum of 4 weeks' notice for any of the above standard requirements, and 6-8 weeks for lane closures & road closures (lead times may change without notice subject to workload and complexity). Any works involving Trunk roads should be coordinated separately and directly with the North & Mid Wales trunk Road Agency. For larger sites with a significant impact upon the highway, a Construction Traffic Management Plan will be required.

Appendix B- Proposed Site Layout



DESIGNER RISK INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING -

CONSTRUCTION:

MAINTENANCE/CLEANING:

DECOMMISSIONING/DEMOLITION:

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.

Scale Bar
1:200

KEY:

- HGV SERVICING ZONE
- EXTERNAL RACKING/STORAGE ZONES (UP TO 6.5m HIGH)
- KEEP CLEAR

SCHEDULE OF ACCOMMODATION:

Site Area - 1.0011 hectares

Building 1 (Showroom/Sales/Warehouse/Offices/Staff Facilities)
GEA - 1,095sqm
GIA - 1,057sqm

Building 2 (Sales/Warehouse)
GEA - 213sqm
GIA - 205sqm

Building 3 (Warehouse)
GEA - 607sqm
GIA - 582sqm

PROPOSED PARKING:

Customer Spaces
15 Car Spaces Incl 2 DDA Space
13 Pick-Up Spaces

Staff Parking
17 Car Spaces Incl 2 DDA Space
5 HGV Spaces

Rev	Date	Amendment		
P05	29.05.24	NUMBER OF CAR PARKING SPACES INCREASED.	NT	AN
P04	10.05.24	SITE BOX AMENDED, RED LINE BOUNDARY UPDATED, SITE AREA AMENDED, CYCLE PARKING ADDED.	NT	AN
P03	29.04.24	SURVEY ADDED.	NT	AN
P02	17.04.24	CUSTOMER/STAFF PARKING SHOWN, CYCLE PARKING ADDED, TREE ROOTS ADDED.	NT	AN
P01	15.04.24	FIRST ISSUE.	NT	TH

mjm Consulting Engineers Ltd
Sovereign House, 18 Sovereign, Wakefield WF1 1TL
T: 01924 811 000 mjmc.co.uk

Project:
TRAVIS PERKINS
CROESFOEL INDUSTRIAL ESTATE
WREXHAM, LL14 4BJ

Client:

Drawing Title:
PROPOSED SITE LAYOUT

NT	AN	AN
MJMC Ref: 9003	Scale: 1:200	Sheet Size: A0
Revision Status: P05	Suitability Status: S4	Date: MAY '24

Suitability Description: FOR APPROVAL

Drawing Reference:
Project - Originator - Zone - Level - File Type - Discipline - Number
9003-MJM-XX-XX-DR-D-6611

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Appendix C- Swept Path Analysis

Appendix D- TRICS Data-Existing Garage

Calculation Reference: AUDIT-701101-250220-0240

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 14 - CAR SHOW ROOMS
Category : A - CAR SHOW ROOMS
TOTAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	EX	ESSEX	1 days
05	**EAST MIDLANDS**		
	LN	LINCOLNSHIRE	1 days
	LR	LEICESTER	1 days
11	**SCOTLAND**		
	SB	SCOTTISH BORDERS	1 days

Primary Filtering selection:

Parameter: Gross floor area
Actual Range: 143 to 6300 (units: sqm)
Range Selected by User: 45 to 9800 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 25/03/16 to 25/03/24

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Friday	2 days

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town	4

Selected Location Sub Categories:

Industrial Zone	1
Development Zone	1
Residential Zone	1
Retail Zone	1

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:

Use Class:

Sui Generis	4 days

Population within 500m Range:
All Surveys Included
Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	3 days

Travel Plan:

No	4 days

PTAL Rating:

No PTAL Present	4 days

LIST OF SITES relevant to selection parameters

1 **EX-14-A-02** **KIA** **ESSEX**
BRAINTREE ROAD
BRAINTREE

Edge of Town
Development Zone
Total Gross floor area: 1275 sqm
Survey date: FRIDAY *08/07/16* *Survey Type: MANUAL*

2 **LN-14-A-03** **CAR SHOW ROOM** **LINCOLNSHIRE**
SOUTH PARK AVENUE
LINCOLN
CANWICK HILL
Edge of Town
Residential Zone
Total Gross floor area: 143 sqm
Survey date: FRIDAY *28/06/19* *Survey Type: MANUAL*

3 **LR-14-A-01** **AUDI** **LEICESTER**
NARBOROUGH ROAD S.
LEICESTER

Edge of Town
Retail Zone
Total Gross floor area: 6300 sqm
Survey date: WEDNESDAY *04/10/23* *Survey Type: MANUAL*

4 **SB-14-A-01** **VOLVO** **SCOTTISH BORDERS**
MELROSE ROAD
GALASHIELS
EASTER LANGLEE
Edge of Town
Industrial Zone
Total Gross floor area: 1275 sqm
Survey date: TUESDAY *25/04/23* *Survey Type: MANUAL*

TRIP RATE for Land Use 14 - CAR SHOW ROOMS/A - CAR SHOW ROOMS

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2950	0.260	3	2950	0.011	3	2950	0.271
08:00 - 09:00	**4**	**2248**	**0.701**	4	2248	0.211	**4**	**2248**	**0.912**
09:00 - 10:00	4	2248	0.489	4	2248	0.367	4	2248	0.856
10:00 - 11:00	4	2248	0.423	4	2248	0.378	4	2248	0.801
11:00 - 12:00	4	2248	0.423	4	2248	0.434	4	2248	0.857
12:00 - 13:00	4	2248	0.411	4	2248	0.400	4	2248	0.811
13:00 - 14:00	4	2248	0.411	4	2248	0.445	4	2248	0.856
14:00 - 15:00	4	2248	0.400	4	2248	0.400	4	2248	0.800
15:00 - 16:00	4	2248	0.211	4	2248	0.356	4	2248	0.567
16:00 - 17:00	4	2248	0.367	4	2248	0.456	4	2248	0.823
17:00 - 18:00	4	2248	0.234	**4**	**2248**	**0.489**	4	2248	0.723
18:00 - 19:00	3	2950	0.034	3	2950	0.373	3	2950	0.407
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.364			4.320			8.684

Parameter summary

Trip rate parameter range selected:	143 - 6300 (units: sqm)
Survey date date range:	25/03/16 - 25/03/24
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

Calculation Reference: AUDIT-701101-250224-0226

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 14 - CAR SHOW ROOMS
Category : A - CAR SHOW ROOMS
TOTAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	KC	KENT	1 days
03	**SOUTH WEST**		
	TB	TORBAY	1 days

Primary Filtering selection:

Parameter: Gross floor area
Actual Range: 284 to 322 (units: sqm)
Range Selected by User: 200 to 9800 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 25/03/16 to 25/03/24

Selected survey days:

Saturday	1 days
Sunday	1 days

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

Selected Location Sub Categories:

High Street	1
No Sub Category	1

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

Sui Generis	2 days

Population within 500m Range:
All Surveys Included
Population within 1 mile:

15,001 to 20,000	1 days
20,001 to 25,000	1 days

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	1 days

Car ownership within 5 miles:

1.1 to 1.5	2 days

Travel Plan:

No	2 days

PTAL Rating:

No PTAL Present	2 days

LIST OF SITES relevant to selection parameters

1 **KC-14-A-03** **Š KODA** **KENT**
RENNIE DRIVE
DARTFORD

Edge of Town
No Sub Category
Total Gross floor area: 322 sqm
Survey date: SUNDAY *12/11/23* *Survey Type: MANUAL*

2 **TB-14-A-01** **SECOND-HAND CAR SALES** **TORBAY**
TORQUAY ROAD
PAIGNTON

Neighbourhood Centre (PPS6 Local Centre)
High Street
Total Gross floor area: 284 sqm
Survey date: SATURDAY *30/03/19* *Survey Type: MANUAL*

TRIP RATE for Land Use 14 - CAR SHOW ROOMS/A - CAR SHOW ROOMS

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	284	0.000	1	284	0.000	1	284	0.000
08:00 - 09:00	1	284	1.056	1	284	0.704	1	284	1.760
09:00 - 10:00	2	303	0.330	2	303	0.165	2	303	0.495
10:00 - 11:00	**2**	**303**	**1.155**	2	303	0.330	2	303	1.485
11:00 - 12:00	2	303	0.330	2	303	0.330	2	303	0.660
12:00 - 13:00	2	303	0.825	2	303	0.660	2	303	1.485
13:00 - 14:00	2	303	0.825	2	303	0.330	2	303	1.155
14:00 - 15:00	2	303	0.495	**2**	**303**	**1.485**	**2**	**303**	**1.980**
15:00 - 16:00	2	303	0.825	2	303	0.660	2	303	1.485
16:00 - 17:00	2	303	0.330	2	303	1.320	2	303	1.650
17:00 - 18:00	2	303	0.000	2	303	0.000	2	303	0.000
18:00 - 19:00	1	284	0.000	1	284	0.000	1	284	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.171			5.984			12.155

Parameter summary

Trip rate parameter range selected:	284 - 322 (units: sqm)
Survey date date range:	25/03/16 - 25/03/24
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	1
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

Appendix E- Travis Perkins Chester Survey Data

Chester, Tuesday 11th February 2025



Travis Perkins

In at Start					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
0	0	0	0	2	2

	Inbound						Outbound						Accumulation					
TIME	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	PED	CYCLE	CAR	LGV	HEAVY	TOTAL
07:00 - 07:15	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	2	2
07:15 - 07:30	3	0	0	0	0	3	1	0	0	0	0	1	0	0	0	0	2	2
07:30 - 07:45	3	0	0	3	0	6	0	0	0	0	0	0	0	0	0	3	2	5
07:45 - 08:00	2	0	0	3	1	6	3	0	0	2	2	7	0	0	0	4	1	5
Hourly Total	**16**	**0**	**0**	**6**	**1**	**23**	**4**	**0**	**0**	**2**	**2**	**8**						
08:00 - 08:15	0	0	0	4	2	6	0	0	0	1	0	1	0	0	0	7	3	10
08:15 - 08:30	0	0	0	0	0	0	1	0	0	6	2	9	0	0	0	1	1	2
08:30 - 08:45	1	0	0	2	0	3	1	0	0	1	1	3	0	0	0	2	0	2
08:45 - 09:00	2	0	1	1	0	4	2	0	1	2	0	5	0	0	0	1	0	1
Hourly Total	**3**	**0**	**1**	**7**	**2**	**13**	**4**	**0**	**1**	**10**	**3**	**18**						
09:00 - 09:15	2	0	1	2	2	7	2	0	1	2	0	5	0	0	0	1	2	3
09:15 - 09:30	1	0	0	3	1	5	0	0	0	4	2	6	0	0	0	0	1	1
09:30 - 09:45	0	0	0	0	0	0	2	0	0	0	1	3	0	0	0	0	0	0
09:45 - 10:00	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	2	1	3
Hourly Total	**3**	**0**	**1**	**7**	**4**	**15**	**4**	**0**	**1**	**6**	**3**	**14**						
10:00 - 10:15	0	0	0	5	0	5	1	0	0	1	0	2	0	0	0	6	1	7
10:15 - 10:30	0	0	1	1	0	2	0	0	0	4	0	4	0	0	1	3	1	5
10:30 - 10:45	1	0	0	2	1	4	1	0	1	4	2	8	0	0	0	1	0	1
10:45 - 11:00	0	0	2	3	3	8	0	0	1	1	2	4	0	0	1	3	1	5
Hourly Total	**1**	**0**	**3**	**11**	**4**	**19**	**2**	**0**	**2**	**10**	**4**	**18**						
11:00 - 11:15	1	0	0	0	1	2	1	0	0	2	2	5	0	0	1	1	0	2
11:15 - 11:30	1	0	0	2	1	4	1	0	1	2	0	4	0	0	0	1	1	2
11:30 - 11:45	1	0	0	2	1	4	1	0	0	1	0	2	0	0	0	2	2	4
11:45 - 12:00	4	0	1	2	1	8	4	0	0	2	3	9	0	0	1	2	0	3
Hourly Total	**7**	**0**	**1**	**6**	**4**	**18**	**7**	**0**	**1**	**7**	**5**	**20**						
12:00 - 12:15	0	0	0	1	1	2	2	0	1	1	0	4	0	0	0	2	1	3
12:15 - 12:30	2	0	1	2	0	5	2	0	0	2	0	4	0	0	1	2	1	4
12:30 - 12:45	1	0	0	3	0	4	4	0	1	4	0	9	0	0	0	1	1	2
12:45 - 13:00	1	0	1	1	1	4	1	0	0	0	0	1	0	0	1	2	2	5
Hourly Total	**4**	**0**	**2**	**7**	**2**	**15**	**9**	**0**	**2**	**7**	**0**	**18**						
13:00 - 13:15	0	0	1	0	0	1	2	0	1	2	0	5	0	0	1	0	2	3
13:15 - 13:30	2	0	0	2	1	5	0	0	0	2	0	2	0	0	1	0	3	4
13:30 - 13:45	3	0	0	1	1	5	0	0	1	0	2	3	0	0	0	1	2	3
13:45 - 14:00	2	0	1	1	1	5	2	0	1	0	1	4	0	0	0	2	2	4
Hourly Total	**7**	**0**	**2**	**4**	**3**	**16**	**4**	**0**	**3**	**4**	**3**	**14**						
14:00 - 14:15	0	0	1	1	0	2	0	0	0	2	2	4	0	0	1	1	0	2
14:15 - 14:30	1	0	0	2	3	6	2	0	1	0	3	6	0	0	0	3	0	3
14:30 - 14:45	1	0	0	0	1	2	1	0	0	3	0	4	0	0	0	0	1	1
14:45 - 15:00	1	0	1	2	1	5	0	0	0	1	1	2	0	0	1	1	1	3
Hourly Total	**3**	**0**	**2**	**5**	**5**	**15**	**3**	**0**	**1**	**6**	**6**	**16**						
15:00 - 15:15	0	0	0	0	1	1	1	0	1	1	1	4	0	0	0	0	1	1
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
15:30 - 15:45	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	1	0	1
15:45 - 16:00	0	0	1	0	0	1	1	0	0	1	0	2	0	0	1	0	0	1
Hourly Total	**0**	**0**	**1**	**1**	**1**	**3**	**3**	**0**	**1**	**2**	**2**	**8**						
16:00 - 16:15	4	0	0	0	0	4	2	0	1	0	0	3	0	0	0	0	0	0
16:15 - 16:30	2	0	0	1	1	4	5	0	0	1	0	6	0	0	0	0	1	1
16:30 - 16:45	1	0	0	0	1	2	2	0	0	0	0	2	0	0	0	0	2	2
16:45 - 17:00	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	2	2
Hourly Total	**7**	**0**	**0**	**1**	**2**	**10**	**11**	**0**	**1**	**1**	**0**	**13**						
17:00 - 17:15	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	2	2
17:15 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Hourly Total	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**						
18:00 - 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
18:30 - 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
18:45 - 19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
TOTAL	**52**	**0**	**13**	**55**	**28**	**148**	**52**	**0**	**13**	**55**	**28**	**148**						

0	0	0	0	2	2
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
In at End					

Chester, Thursday 13th February 2025



Travis Perkins

In at Start					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
0	0	0	0	1	1

	Inbound						Outbound						Accumulation					
TIME	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	PED	CYCLE	CAR	LGV	HEAVY	TOTAL
07:00 - 07:15	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	1
07:15 - 07:30	2	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0	1	1
07:30 - 07:45	2	0	0	3	0	5	0	0	0	1	0	1	0	0	0	2	1	3
07:45 - 08:00	0	0	0	2	0	2	0	0	0	2	0	2	0	0	0	2	1	3
Hourly Total	**7**	**0**	**0**	**5**	**0**	**12**	**1**	**0**	**0**	**3**	**0**	**4**						
08:00 - 08:15	1	0	1	7	0	9	0	0	1	0	0	1	0	0	0	9	1	10
08:15 - 08:30	6	0	0	2	0	8	7	0	0	8	0	15	0	0	0	3	1	4
08:30 - 08:45	0	0	0	3	1	4	1	0	0	3	0	4	0	0	0	3	2	5
08:45 - 09:00	1	0	0	4	0	5	1	0	0	4	1	6	0	0	0	3	1	4
Hourly Total	**8**	**0**	**1**	**16**	**1**	**26**	**9**	**0**	**1**	**15**	**1**	**26**						
09:00 - 09:15	1	0	0	1	0	2	0	0	0	3	1	4	0	0	0	1	0	1
09:15 - 09:30	0	0	0	4	1	5	1	0	0	2	1	4	0	0	0	3	0	3
09:30 - 09:45	0	0	1	1	1	3	0	0	1	3	0	4	0	0	0	1	1	2
09:45 - 10:00	0	0	2	3	0	5	0	0	0	1	1	2	0	0	2	3	0	5
Hourly Total	**1**	**0**	**3**	**9**	**2**	**15**	**1**	**0**	**1**	**9**	**3**	**14**						
10:00 - 10:15	0	0	0	2	0	2	0	0	1	4	0	5	0	0	1	1	0	2
10:15 - 10:30	3	0	0	0	0	3	3	0	1	1	0	5	0	0	0	0	0	0
10:30 - 10:45	3	0	0	2	0	5	2	0	0	0	0	2	0	0	0	2	0	2
10:45 - 11:00	2	0	1	2	1	6	0	0	0	3	1	4	0	0	1	1	0	2
Hourly Total	**8**	**0**	**1**	**6**	**1**	**16**	**5**	**0**	**2**	**8**	**1**	**16**						
11:00 - 11:15	1	0	0	3	1	5	0	0	1	1	0	2	0	0	0	3	1	4
11:15 - 11:30	4	0	0	2	0	6	2	0	0	3	1	6	0	0	0	2	0	2
11:30 - 11:45	3	0	1	4	1	9	0	0	0	1	1	2	0	0	1	5	0	6
11:45 - 12:00	0	0	0	1	1	2	6	0	1	4	0	11	0	0	0	2	1	3
Hourly Total	**8**	**0**	**1**	**10**	**3**	**22**	**8**	**0**	**2**	**9**	**2**	**21**						
12:00 - 12:15	0	0	1	2	0	3	0	0	1	1	1	3	0	0	0	3	0	3
12:15 - 12:30	3	0	0	2	0	5	2	0	0	3	0	5	0	0	0	2	0	2
12:30 - 12:45	0	0	0	1	0	1	2	0	0	1	0	3	0	0	0	2	0	2
12:45 - 13:00	1	0	0	0	0	1	1	0	0	2	0	3	0	0	0	0	0	0
Hourly Total	**4**	**0**	**1**	**5**	**0**	**10**	**5**	**0**	**1**	**7**	**1**	**14**						
13:00 - 13:15	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1
13:15 - 13:30	4	0	1	1	2	8	5	0	0	1	0	6	0	0	1	1	2	4
13:30 - 13:45	0	0	1	2	0	3	0	0	2	1	2	5	0	0	0	2	0	2
13:45 - 14:00	1	0	0	0	1	2	2	0	0	1	0	3	0	0	0	1	1	2
Hourly Total	**5**	**0**	**2**	**4**	**3**	**14**	**7**	**0**	**2**	**3**	**2**	**14**						
14:00 - 14:15	2	2	0	0	0	4	1	0	0	0	1	2	0	2	0	1	0	3
14:15 - 14:30	0	0	1	0	1	2	0	1	0	0	0	1	0	1	1	1	1	4
14:30 - 14:45	0	0	1	0	1	2	0	1	0	1	0	2	0	0	2	0	2	4
14:45 - 15:00	1	0	1	1	1	4	1	0	1	0	0	2	0	0	2	1	3	6
Hourly Total	**3**	**2**	**3**	**1**	**3**	**12**	**2**	**2**	**1**	**1**	**1**	**7**						
15:00 - 15:15	0	0	0	0	1	1	0	0	2	1	2	5	0	0	0	0	2	2
15:15 - 15:30	0	0	0	3	2	5	0	0	0	0	1	1	0	0	0	3	3	6
15:30 - 15:45	0	0	0	3	1	4	1	0	0	3	2	6	0	0	0	3	2	5
15:45 - 16:00	0	0	1	1	0	2	0	0	0	1	0	1	0	0	1	3	2	6
Hourly Total	**0**	**0**	**1**	**7**	**4**	**12**	**1**	**0**	**2**	**5**	**5**	**13**						
16:00 - 16:15	0	0	2	0	1	3	0	0	0	2	1	3	0	0	3	1	2	6
16:15 - 16:30	0	0	0	1	2	3	0	0	0	1	2	3	0	0	3	1	2	6
16:30 - 16:45	0	0	0	1	1	2	3	0	1	2	1	7	0	0	2	0	2	4
16:45 - 17:00	1	0	0	0	0	1	1	0	0	0	0	1	0	0	2	0	2	4
Hourly Total	**1**	**0**	**2**	**2**	**4**	**9**	**4**	**0**	**1**	**5**	**4**	**14**						
17:00 - 17:15	0	0	0	0	0	0	2	0	1	0	0	3	0	0	1	0	2	3
17:15 - 17:30	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**4**						
18:00 - 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
18:30 - 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
18:45 - 19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
TOTAL	**45**	**2**	**15**	**65**	**21**	**148**	**45**	**2**	**15**	**65**	**20**	**147**						

0	0	0	0	2	2
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
In at End					

Chester, Saturday 15th February 2025



Travis Perkins

In at Start					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
0	0	0	0	3	3

	Inbound						Outbound						Accumulation					
TIME	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	PED	CYCLE	CAR	LGV	HEAVY	TOTAL
07:00 - 07:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
07:15 - 07:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
07:30 - 07:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
07:45 - 08:00	1	0	0	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**						
08:00 - 08:15	4	0	0	0	0	**4**	3	0	0	0	0	**3**	0	0	0	0	3	**3**
08:15 - 08:30	1	0	0	0	0	**1**	1	0	0	0	0	**1**	0	0	0	0	3	**3**
08:30 - 08:45	1	0	0	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
08:45 - 09:00	1	0	0	0	0	**1**	1	0	0	0	0	**1**	0	0	0	0	3	**3**
Hourly Total	**7**	**0**	**0**	**0**	**0**	**7**	**5**	**0**	**0**	**0**	**0**	**5**						
09:00 - 09:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
09:15 - 09:30	3	0	0	0	0	**3**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
09:30 - 09:45	0	0	0	0	0	**0**	2	0	0	0	0	**2**	0	0	0	0	3	**3**
09:45 - 10:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**3**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**2**						
10:00 - 10:15	2	0	0	0	0	**2**	0	0	0	0	1	**1**	0	0	0	0	2	**2**
10:15 - 10:30	0	0	0	0	0	**0**	2	0	0	0	0	**2**	0	0	0	0	2	**2**
10:30 - 10:45	2	0	0	0	0	**2**	1	0	0	0	0	**1**	0	0	0	0	2	**2**
10:45 - 11:00	2	0	0	0	1	**3**	3	0	0	0	0	**3**	0	0	0	0	3	**3**
Hourly Total	**6**	**0**	**0**	**0**	**1**	**7**	**6**	**0**	**0**	**0**	**1**	**7**						
11:00 - 11:15	0	0	0	0	0	**0**	1	0	0	0	0	**1**	0	0	0	0	3	**3**
11:15 - 11:30	2	0	0	0	0	**2**	2	0	0	0	0	**2**	0	0	0	0	3	**3**
11:30 - 11:45	3	0	0	0	0	**3**	3	0	0	0	0	**3**	0	0	0	0	3	**3**
11:45 - 12:00	0	0	0	0	0	**0**	1	0	0	0	0	**1**	0	0	0	0	3	**3**
Hourly Total	**5**	**0**	**0**	**0**	**0**	**5**	**7**	**0**	**0**	**0**	**0**	**7**						
12:00 - 12:15	0	0	0	0	0	**0**	2	0	0	0	0	**2**	0	0	0	0	3	**3**
12:15 - 12:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
12:30 - 12:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
12:45 - 13:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**						
13:00 - 13:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
13:15 - 13:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
13:30 - 13:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
13:45 - 14:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
14:00 - 14:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
14:15 - 14:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
14:30 - 14:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
14:45 - 15:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
15:00 - 15:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
15:15 - 15:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
15:30 - 15:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
15:45 - 16:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
16:00 - 16:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
16:15 - 16:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
16:30 - 16:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
16:45 - 17:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
17:00 - 17:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
17:15 - 17:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
17:30 - 17:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
17:45 - 18:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
18:00 - 18:15	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
18:15 - 18:30	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
18:30 - 18:45	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
18:45 - 19:00	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	3	**3**
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**						
TOTAL	**22**	**0**	**0**	**0**	**1**	**23**	**22**	**0**	**0**	**0**	**1**	**23**						

0	0	0	0	3	**3**
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
In at End					

Appendix F- Trip Generation & Parking Accumulation Calculations

Chester Survey Data (Average Weekday)

Site Area Trip Rate derived for 1 ha

	Inbound								Outbound						
	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh TOTAL		PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh TOTAL
07:00 - 07:15	5	0	0	0	0	5	0		0	0	0	0	0	0	0
07:15 - 07:30	2	0	0	0	0	2	0		1	0	0	0	0	1	0
07:30 - 07:45	2	0	0	3	0	5	3		0	0	0	0	0	0	0
07:45 - 08:00	1	0	0	2	0	4	3		1	0	0	2	1	4	3
Hourly Total	**11**	**0**	**0**	**5**	**0**	**17**	**6**		**2**	**0**	**0**	**2**	**1**	**6**	**3**
08:00 - 08:15	0	0	0	5	1	7	7		0	0	0	0	0	1	1
08:15 - 08:30	3	0	0	1	0	4	1		4	0	0	7	1	12	8
08:30 - 08:45	0	0	0	2	0	3	3		1	0	0	2	0	3	2
08:45 - 09:00	1	0	0	2	0	4	3		1	0	0	3	0	5	4
Hourly Total	**5**	**0**	**1**	**11**	**1**	**19.12**	**13.73**		**6**	**0**	**1**	**12**	**2**	**21.57**	**15**
09:00 - 09:15	1	0	0	1	1	4	3		1	0	0	2	0	4	3
09:15 - 09:30	0	0	0	3	1	5	4		0	0	0	3	1	5	4
09:30 - 09:45	0	0	0	0	0	1	1		1	0	0	1	0	3	2
09:45 - 10:00	0	0	1	2	0	4	4		0	0	0	0	0	1	1
Hourly Total	**2**	**0**	**2**	**8**	**3**	**15**	**13**		**2**	**0**	**1**	**7**	**3**	**14**	**11**
10:00 - 10:15	0	0	0	3	0	3	3		0	0	0	2	0	3	3
10:15 - 10:30	1	0	0	0	0	2	1		1	0	0	2	0	4	3
10:30 - 10:45	2	0	0	2	0	4	2		1	0	0	2	1	5	3
10:45 - 11:00	1	0	1	2	2	7	6		0	0	0	2	1	4	4
Hourly Total	**4**	**0**	**2**	**8**	**2**	**17**	**13**		**3**	**0**	**2**	**9**	**2**	**17**	**13**
11:00 - 11:15	1	0	0	1	1	3	2		0	0	0	1	1	3	3
11:15 - 11:30	2	0	0	2	0	5	2		1	0	0	2	0	5	3
11:30 - 11:45	2	0	0	3	1	6	4		0	0	0	1	0	2	1
11:45 - 12:00	2	0	0	1	1	5	3		5	0	0	3	1	10	5
Hourly Total	**7**	**0**	**1**	**8**	**3**	**20**	**12**		**7**	**0**	**1**	**8**	**3**	**20**	**13**
12:00 - 12:15	0	0	0	1	0	2	2		1	0	1	1	0	3	2
12:15 - 12:30	2	0	0	2	0	5	2		2	0	0	2	0	4	2
12:30 - 12:45	0	0	0	2	0	2	2		3	0	0	2	0	6	3
12:45 - 13:00	1	0	0	0	0	2	1		1	0	0	1	0	2	1
Hourly Total	**4**	**0**	**1**	**6**	**1**	**12**	**8**		**7**	**0**	**1**	**7**	**0**	**16**	**9**
13:00 - 13:15	0	0	0	0	0	1	1		1	0	0	1	0	2	1
13:15 - 13:30	3	0	0	1	1	6	3		2	0	0	1	0	4	1
13:30 - 13:45	1	0	0	1	0	4	2		0	0	1	0	2	4	4
13:45 - 14:00	1	0	0	0	1	3	2		2	0	0	0	0	3	1
Hourly Total	**6**	**0**	**2**	**4**	**3**	**15**	**9**		**5**	**0**	**2**	**3**	**2**	**14**	**8**
14:00 - 14:15	1	1	0	0	0	3	1		0	0	0	1	1	3	2
14:15 - 14:30	0	0	0	1	2	4	3		1	0	0	0	1	3	2
14:30 - 14:45	0	0	0	0	1	2	1		0	0	0	2	0	3	2
14:45 - 15:00	1	0	1	1	1	4	3		0	0	0	0	0	2	1
Hourly Total	**3**	**1**	**2**	**3**	**4**	**13**	**9**		**2**	**1**	**1**	**3**	**3**	**11**	**8**
15:00 - 15:15	0	0	0	0	1	1	1		0	0	1	1	1	4	4
15:15 - 15:30	0	0	0	1	1	2	2		0	0	0	0	1	1	1
15:30 - 15:45	0	0	0	2	0	2	2		1	0	0	1	1	3	2
15:45 - 16:00	0	0	1	0	0	1	1		0	0	0	1	0	1	1
Hourly Total	**0**	**0**	**1**	**4**	**2**	**7**	**7**		**2**	**0**	**1**	**3**	**3**	**10**	**8**
16:00 - 16:15	2	0	1	0	0	3	1		1	0	0	1	0	3	2
16:15 - 16:30	1	0	0	1	1	3	2		2	0	0	1	1	4	2
16:30 - 16:45	0	0	0	0	1	2	1		2	0	0	1	0	4	2
16:45 - 17:00	0	0	0	0	0	0	0		1	0	0	0	0	1	0
Hourly Total	**4**	**0**	**1**	**1**	**3**	**9**	**5**		**7**	**0**	**1**	**3**	**2**	**13**	**6**
17:00 - 17:15	0	0	0	0	0	0	0		1	0	0	0	0	2	0
17:15 - 17:30	0	0	0	0	0	0	0		0	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0		0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0.49**	**0**		**1**	**0**	**1**	**0**	**0**	**2.45**	**1**
18:00 - 18:15	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:30 - 18:45	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL	**48**	**1**	**14**	**59**	**24**	**145.10**	**97**		**48**	**1**	**14**	**59**	**24**	**144.61**	**96**

Chester Survey Data (Average Weekday)

Site Area Trip Rate applied to Wrexham Store 1.011 ha

	Inbound								Outbound						
	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh Total		PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh Total
07:00 - 07:15	5	0	0	0	0	5	0		0	0	0	0	0	0	0
07:15 - 07:30	2	0	0	0	0	2	0		1	0	0	0	0	1	0
07:30 - 07:45	2	0	0	3	0	5	3		0	0	0	0	0	0	0
07:45 - 08:00	1	0	0	2	0	4	3		1	0	0	2	1	4	3
Hourly Total	**11**	**0**	**0**	**5**	**0**	**17**	**6**		**2**	**0**	**0**	**2**	**1**	**6**	**3**
08:00 - 08:15	0	0	0	5	1	7	7		0	0	0	0	0	1	1
08:15 - 08:30	3	0	0	1	0	4	1		4	0	0	7	1	12	8
08:30 - 08:45	0	0	0	2	0	3	3		1	0	0	2	0	3	2
08:45 - 09:00	1	0	0	2	0	4	3		1	0	0	3	0	5	4
Hourly Total	**5**	**0**	**1**	**11**	**1**	**19**	**14**		**6**	**0**	**1**	**12**	**2**	**22**	**15**
09:00 - 09:15	1	0	0	1	1	4	3		1	0	0	2	0	4	3
09:15 - 09:30	0	0	0	3	1	5	4		0	0	0	3	1	5	4
09:30 - 09:45	0	0	0	0	0	1	1		1	0	0	1	0	3	2
09:45 - 10:00	0	0	1	2	0	4	4		0	0	0	0	0	1	1
Hourly Total	**2**	**0**	**2**	**8**	**3**	**15**	**13**		**2**	**0**	**1**	**7**	**3**	**14**	**11**
10:00 - 10:15	0	0	0	3	0	3	3		0	0	0	2	0	3	3
10:15 - 10:30	1	0	0	0	0	2	1		1	0	0	2	0	4	3
10:30 - 10:45	2	0	0	2	0	4	2		1	0	0	2	1	5	3
10:45 - 11:00	1	0	1	2	2	7	6		0	0	0	2	1	4	4
Hourly Total	**4**	**0**	**2**	**8**	**2**	**17**	**13**		**3**	**0**	**2**	**9**	**2**	**17**	**13**
11:00 - 11:15	1	0	0	1	1	3	2		0	0	0	1	1	3	3
11:15 - 11:30	2	0	0	2	0	5	2		1	0	0	2	0	5	3
11:30 - 11:45	2	0	0	3	1	6	4		0	0	0	1	0	2	1
11:45 - 12:00	2	0	0	1	1	5	3		5	0	0	3	1	10	5
Hourly Total	**7**	**0**	**1**	**8**	**3**	**20**	**12**		**7**	**0**	**1**	**8**	**3**	**20**	**13**
12:00 - 12:15	0	0	0	1	0	2	2		1	0	1	1	0	3	2
12:15 - 12:30	2	0	0	2	0	5	2		2	0	0	2	0	4	2
12:30 - 12:45	0	0	0	2	0	2	2		3	0	0	2	0	6	3
12:45 - 13:00	1	0	0	0	0	2	1		1	0	0	1	0	2	1
Hourly Total	**4**	**0**	**1**	**6**	**1**	**12**	**8**		**7**	**0**	**1**	**7**	**0**	**16**	**9**
13:00 - 13:15	0	0	0	0	0	1	1		1	0	0	1	0	2	1
13:15 - 13:30	3	0	0	1	1	6	3		2	0	0	1	0	4	1
13:30 - 13:45	1	0	0	1	0	4	2		0	0	1	0	2	4	4
13:45 - 14:00	1	0	0	0	1	3	2		2	0	0	0	0	3	1
Hourly Total	**6**	**0**	**2**	**4**	**3**	**15**	**9**		**5**	**0**	**2**	**3**	**2**	**14**	**8**
14:00 - 14:15	1	1	0	0	0	3	1		0	0	0	1	1	3	2
14:15 - 14:30	0	0	0	1	2	4	3		1	0	0	0	1	3	2
14:30 - 14:45	0	0	0	0	1	2	1		0	0	0	2	0	3	2
14:45 - 15:00	1	0	1	1	1	4	3		0	0	0	0	0	2	1
Hourly Total	**3**	**1**	**2**	**3**	**4**	**13**	**9**		**2**	**1**	**1**	**3**	**3**	**11**	**8**
15:00 - 15:15	0	0	0	0	1	1	1		0	0	1	1	1	4	4
15:15 - 15:30	0	0	0	1	1	2	2		0	0	0	0	1	1	1
15:30 - 15:45	0	0	0	2	0	2	2		1	0	0	1	1	3	2
15:45 - 16:00	0	0	1	0	0	1	1		0	0	0	1	0	1	1
Hourly Total	**0**	**0**	**1**	**4**	**2**	**7**	**7**		**2**	**0**	**1**	**3**	**3**	**10**	**8**
16:00 - 16:15	2	0	1	0	0	3	1		1	0	0	1	0	3	2
16:15 - 16:30	1	0	0	1	1	3	2		2	0	0	1	1	4	2
16:30 - 16:45	0	0	0	0	1	2	1		2	0	0	1	0	4	2
16:45 - 17:00	0	0	0	0	0	0	0		1	0	0	0	0	1	0
Hourly Total	**4**	**0**	**1**	**1**	**3**	**9**	**5**		**7**	**0**	**1**	**3**	**2**	**13**	**6**
17:00 - 17:15	0	0	0	0	0	0	0		1	0	0	0	0	2	0
17:15 - 17:30	0	0	0	0	0	0	0		0	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0		0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**		**1**	**0**	**1**	**0**	**0**	**2**	**1**
18:00 - 18:15	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:30 - 18:45	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**			**0**	**0**	**0**	**0**	**0**	**0**	
TOTAL	**48**	**1**	**14**	**59**	**24**	**147**	**98**		**48**	**1**	**14**	**59**	**24**	**146**	**97**

In at Start					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
0	0	0	0	0	0

Accumulation					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	2	0	2
0	0	0	3	0	2
0	0	0	8	0	8
0	0	0	2	0	1
0	0	0	2	0	2
0	0	0	2	-1	1
0	0	0	1	0	0
0	0	0	1	-1	0
0	0	0	1	-1	0
0	0	1	2	-1	2
0	0	0	3	-1	3
0	0	0	1	-1	1
0	0	0	1	-1	0
0	0	1	2	-1	2
0	0	0	2	-1	1
0	0	0	2	-1	1
0	0	0	1	-1	0
0	0	0	1	0	1
0	0	0	0	0	0
0	0	1	0	1	2
0	0	0	1	0	1
0	0	0	1	0	1
0	1	0	1	-1	1
0	0	0	2	-1	2
0	0	1	0	0	1
0	0	1	1	0	3
0	0	0	0	0	0
0	0	0	1	0	1
0	0	0	2	0	1
0	0	1	1	0	2
0	0	1	0	0	1
0	0	1	0	0	2
0	0	1	0	0	1
0	0	1	0	0	1
0	0	0	0	0	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

In at End					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL

Chester Survey Data (Average Weekday)

Floor Area Trip Rate derived for 100 sqm

	Inbound								Outbound						
	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh TOTAL		PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh TOTAL
07:00 - 07:15	0.492	0.000	0.000	0.000	0.000	**0.492**	**0.000**		0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
07:15 - 07:30	0.224	0.000	0.000	0.000	0.000	**0.224**	**0.000**		0.090	0.000	0.000	0.000	0.000	**0.090**	**0.000**
07:30 - 07:45	0.224	0.000	0.000	0.269	0.000	**0.492**	**0.269**		0.000	0.000	0.000	0.045	0.000	**0.045**	**0.045**
07:45 - 08:00	0.090	0.000	0.000	0.224	0.045	**0.358**	**0.269**		0.134	0.000	0.000	0.179	0.090	**0.403**	**0.269**
Hourly Total	**1.030**	**0.000**	**0.000**	**0.492**	**0.045**	1.567	0.537		**0.224**	**0.000**	**0.000**	**0.224**	**0.090**	0.537	0.313
08:00 - 08:15	0.045	0.000	0.045	0.492	0.090	**0.671**	**0.627**		0.000	0.000	0.045	0.045	0.000	**0.090**	**0.090**
08:15 - 08:30	0.269	0.000	0.000	0.090	0.000	**0.358**	**0.090**		0.358	0.000	0.000	0.627	0.090	**1.074**	**0.716**
08:30 - 08:45	0.045	0.000	0.000	0.224	0.045	**0.313**	**0.269**		0.090	0.000	0.000	0.179	0.045	**0.313**	**0.224**
08:45 - 09:00	0.134	0.000	0.045	0.224	0.000	**0.403**	**0.269**		0.134	0.000	0.045	0.269	0.045	**0.492**	**0.358**
Hourly Total	**0.492**	**0.000**	**0.090**	**1.030**	**0.134**	1.746	1.253		**0.582**	**0.000**	**0.090**	**1.119**	**0.179**	1.970	1.388
09:00 - 09:15	0.134	0.000	0.045	0.134	0.090	**0.403**	**0.269**		0.090	0.000	0.045	0.224	0.045	**0.403**	**0.313**
09:15 - 09:30	0.045	0.000	0.000	0.313	0.090	**0.448**	**0.403**		0.045	0.000	0.000	0.269	0.134	**0.448**	**0.403**
09:30 - 09:45	0.000	0.000	0.045	0.045	0.045	**0.134**	**0.134**		0.090	0.000	0.045	0.134	0.045	**0.313**	**0.224**
09:45 - 10:00	0.000	0.000	0.090	0.224	0.045	**0.358**	**0.358**		0.000	0.000	0.000	0.045	0.045	**0.090**	**0.090**
Hourly Total	**0.179**	**0.000**	**0.179**	**0.716**	**0.269**	1.343	1.164		**0.224**	**0.000**	**0.090**	**0.671**	**0.269**	1.253	1.030
10:00 - 10:15	0.000	0.000	0.000	0.313	0.000	**0.313**	**0.313**		0.045	0.000	0.045	0.224	0.000	**0.313**	**0.269**
10:15 - 10:30	0.134	0.000	0.045	0.045	0.000	**0.224**	**0.090**		0.134	0.000	0.045	0.224	0.000	**0.403**	**0.269**
10:30 - 10:45	0.179	0.000	0.000	0.179	0.045	**0.403**	**0.224**		0.134	0.000	0.045	0.179	0.090	**0.448**	**0.313**
10:45 - 11:00	0.090	0.000	0.134	0.224	0.179	**0.627**	**0.537**		0.000	0.000	0.045	0.179	0.134	**0.358**	**0.358**
Hourly Total	**0.403**	**0.000**	**0.179**	**0.761**	**0.224**	1.567	1.164		**0.313**	**0.000**	**0.179**	**0.806**	**0.224**	1.522	1.209
11:00 - 11:15	0.090	0.000	0.000	0.134	0.090	**0.313**	**0.224**		0.045	0.000	0.045	0.134	0.090	**0.313**	**0.269**
11:15 - 11:30	0.224	0.000	0.000	0.179	0.045	**0.448**	**0.224**		0.134	0.000	0.045	0.224	0.045	**0.448**	**0.313**
11:30 - 11:45	0.179	0.000	0.045	0.269	0.090	**0.582**	**0.403**		0.045	0.000	0.000	0.090	0.045	**0.179**	**0.134**
11:45 - 12:00	0.179	0.000	0.045	0.134	0.090	**0.448**	**0.269**		0.448	0.000	0.045	0.269	0.134	**0.895**	**0.448**
Hourly Total	**0.671**	**0.000**	**0.090**	**0.716**	**0.313**	1.791	1.119		**0.671**	**0.000**	**0.134**	**0.716**	**0.313**	1.835	1.164
12:00 - 12:15	0.000	0.000	0.045	0.134	0.045	**0.224**	**0.224**		0.090	0.000	0.090	0.090	0.045	**0.313**	**0.224**
12:15 - 12:30	0.224	0.000	0.045	0.179	0.000	**0.448**	**0.224**		0.179	0.000	0.000	0.224	0.000	**0.403**	**0.224**
12:30 - 12:45	0.045	0.000	0.000	0.179	0.000	**0.224**	**0.179**		0.269	0.000	0.045	0.224	0.000	**0.537**	**0.269**
12:45 - 13:00	0.090	0.000	0.045	0.045	0.045	**0.224**	**0.134**		0.090	0.000	0.000	0.090	0.000	**0.179**	**0.090**
Hourly Total	**0.358**	**0.000**	**0.134**	**0.537**	**0.090**	1.119	0.761		**0.627**	**0.000**	**0.134**	**0.627**	**0.045**	1.432	0.806
13:00 - 13:15	0.000	0.000	0.045	0.045	0.000	**0.090**	**0.090**		0.090	0.000	0.045	0.090	0.000	**0.224**	**0.134**
13:15 - 13:30	0.269	0.000	0.045	0.134	0.134	**0.582**	**0.313**		0.224	0.000	0.000	0.134	0.000	**0.358**	**0.134**
13:30 - 13:45	0.134	0.000	0.045	0.134	0.045	**0.358**	**0.224**		0.000	0.000	0.134	0.045	0.179	**0.358**	**0.358**
13:45 - 14:00	0.134	0.000	0.045	0.045	0.090	**0.313**	**0.179**		0.179	0.000	0.045	0.045	0.045	**0.313**	**0.134**
Hourly Total	**0.537**	**0.000**	**0.179**	**0.358**	**0.269**	1.343	0.806		**0.492**	**0.000**	**0.224**	**0.313**	**0.224**	1.253	0.761
14:00 - 14:15	0.090	0.090	0.045	0.045	0.000	**0.269**	**0.090**		0.045	0.000	0.000	0.090	0.134	**0.269**	**0.224**
14:15 - 14:30	0.045	0.000	0.045	0.090	0.179	**0.358**	**0.313**		0.090	0.045	0.045	0.000	0.134	**0.313**	**0.179**
14:30 - 14:45	0.045	0.000	0.045	0.000	0.090	**0.179**	**0.134**		0.045	0.045	0.000	0.179	0.000	**0.269**	**0.179**
14:45 - 15:00	0.090	0.000	0.090	0.134	0.090	**0.403**	**0.313**		0.045	0.000	0.045	0.045	0.045	**0.179**	**0.134**
Hourly Total	**0.269**	**0.090**	**0.224**	**0.269**	**0.358**	1.209	0.850		**0.224**	**0.090**	**0.090**	**0.313**	**0.313**	1.030	0.716
15:00 - 15:15	0.000	0.000	0.000	0.000	0.090	**0.090**	**0.090**		0.045	0.000	0.134	0.090	0.134	**0.403**	**0.358**
15:15 - 15:30	0.000	0.000	0.000	0.134	0.090	**0.224**	**0.224**		0.000	0.000	0.000	0.000	0.090	**0.090**	**0.090**
15:30 - 15:45	0.000	0.000	0.000	0.179	0.045	**0.224**	**0.224**		0.090	0.000	0.000	0.134	0.090	**0.313**	**0.224**
15:45 - 16:00	0.000	0.000	0.090	0.045	0.000	**0.134**	**0.134**		0.045	0.000	0.000	0.090	0.000	**0.134**	**0.090**
Hourly Total	**0.000**	**0.000**	**0.090**	**0.358**	**0.224**	0.671	0.671		**0.179**	**0.000**	**0.134**	**0.313**	**0.313**	0.940	0.761
16:00 - 16:15	0.179	0.000	0.090	0.000	0.045	**0.313**	**0.134**		0.090	0.000	0.045	0.090	0.045	**0.269**	**0.179**
16:15 - 16:30	0.090	0.000	0.000	0.090	0.134	**0.313**	**0.224**		0.224	0.000	0.000	0.090	0.090	**0.403**	**0.179**
16:30 - 16:45	0.045	0.000	0.000	0.045	0.090	**0.179**	**0.134**		0.224	0.000	0.045	0.090	0.045	**0.403**	**0.179**
16:45 - 17:00	0.045	0.000	0.000	0.000	0.000	**0.045**	**0.000**		0.134	0.000	0.000	0.000	0.000	**0.134**	**0.000**
Hourly Total	**0.358**	**0.000**	**0.090**	**0.134**	**0.269**	0.850	0.492		**0.671**	**0.000**	**0.090**	**0.269**	**0.179**	1.209	0.537
17:00 - 17:15	0.045	0.000	0.000	0.000	0.000	**0.045**	**0.000**		0.134	0.000	0.045	0.000	0.000	**0.179**	**0.045**
17:15 - 17:30	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**		0.000	0.000	0.045	0.000	0.000	**0.045**	**0.045**
17:30 - 17:45	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**		0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
17:45 - 18:00	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**		0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
Hourly Total	**0.045**	**0.000**	**0.000**	**0.000**	**0.000**	0.045	0.000		**0.134**	**0.000**	**0.090**	**0.000**	**0.000**	0.224	0.090
18:00 - 18:15	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**		0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
18:15 - 18:30	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**		0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
18:30 - 18:45	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**		0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
18:45 - 19:00	0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**		0.000	0.000	0.000	0.000	0.000	**0.000**	**0.000**
Hourly Total	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	0.000	0.000		**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	0.000	0.000

TOTAL	**4**	**0**	**1**	**5**	**2**	**13**	**9**		**4**	**0**	**1**	**5**	**2**	**13**	**9**

Chester Survey Data (Average Weekday)

Floor Area Trip Rate applied to Wrexham Store (1915 sqm)

	Inbound								Outbound						
	PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh Total		PED	CYCLE	CAR	LGV	HEAVY	TOTAL	Veh Total
07:00 - 07:15	9	0	0	0	0	9	0		0	0	0	0	0	0	0
07:15 - 07:30	4	0	0	0	0	4	0		2	0	0	0	0	2	0
07:30 - 07:45	4	0	0	5	0	9	5		0	0	0	1	0	1	1
07:45 - 08:00	2	0	0	4	1	7	5		3	0	0	3	2	8	5
Hourly Total	**20**	**0**	**0**	**9**	**1**	**30**	**10**		**4**	**0**	**0**	**4**	**2**	**10**	**6**
08:00 - 08:15	1	0	1	9	2	13	12		0	0	1	1	0	2	2
08:15 - 08:30	5	0	0	2	0	7	2		7	0	0	12	2	21	14
08:30 - 08:45	1	0	0	4	1	6	5		2	0	0	3	1	6	4
08:45 - 09:00	3	0	1	4	0	8	5		3	0	1	5	1	9	7
Hourly Total	**9**	**0**	**2**	**20**	**3**	**33**	**24**		**11**	**0**	**2**	**21**	**3**	**38**	**27**
09:00 - 09:15	3	0	1	3	2	8	5		2	0	1	4	1	8	6
09:15 - 09:30	1	0	0	6	2	9	8		1	0	0	5	3	9	8
09:30 - 09:45	0	0	1	1	1	3	3		2	0	1	3	1	6	4
09:45 - 10:00	0	0	2	4	1	7	7		0	0	0	1	1	2	2
Hourly Total	**3**	**0**	**3**	**14**	**5**	**26**	**22**		**4**	**0**	**2**	**13**	**5**	**24**	**20**
10:00 - 10:15	0	0	0	6	0	6	6		1	0	1	4	0	6	5
10:15 - 10:30	3	0	1	1	0	4	2		3	0	1	4	0	8	5
10:30 - 10:45	3	0	0	3	1	8	4		3	0	1	3	2	9	6
10:45 - 11:00	2	0	3	4	3	12	10		0	0	1	3	3	7	7
Hourly Total	**8**	**0**	**3**	**15**	**4**	**30**	**22**		**6**	**0**	**3**	**15**	**4**	**29**	**23**
11:00 - 11:15	2	0	0	3	2	6	4		1	0	1	3	2	6	5
11:15 - 11:30	4	0	0	3	1	9	4		3	0	1	4	1	9	6
11:30 - 11:45	3	0	1	5	2	11	8		1	0	0	2	1	3	3
11:45 - 12:00	3	0	1	3	2	9	5		9	0	1	5	3	17	9
Hourly Total	**13**	**0**	**2**	**14**	**6**	**34**	**21**		**13**	**0**	**3**	**14**	**6**	**35**	**22**
12:00 - 12:15	0	0	1	3	1	4	4		2	0	2	2	1	6	4
12:15 - 12:30	4	0	1	3	0	9	4		3	0	0	4	0	8	4
12:30 - 12:45	1	0	0	3	0	4	3		5	0	1	4	0	10	5
12:45 - 13:00	2	0	1	1	1	4	3		2	0	0	2	0	3	2
Hourly Total	**7**	**0**	**3**	**10**	**2**	**21**	**15**		**12**	**0**	**3**	**12**	**1**	**27**	**15**
13:00 - 13:15	0	0	1	1	0	2	2		2	0	1	2	0	4	3
13:15 - 13:30	5	0	1	3	3	11	6		4	0	0	3	0	7	3
13:30 - 13:45	3	0	1	3	1	7	4		0	0	3	1	3	7	7
13:45 - 14:00	3	0	1	1	2	6	3		3	0	1	1	1	6	3
Hourly Total	**10**	**0**	**3**	**7**	**5**	**26**	**15**		**9**	**0**	**4**	**6**	**4**	**24**	**15**
14:00 - 14:15	2	2	1	1	0	5	2		1	0	0	2	3	5	4
14:15 - 14:30	1	0	1	2	3	7	6		2	1	1	0	3	6	3
14:30 - 14:45	1	0	1	0	2	3	3		1	1	0	3	0	5	3
14:45 - 15:00	2	0	2	3	2	8	6		1	0	1	1	1	3	3
Hourly Total	**5**	**2**	**4**	**5**	**7**	**23**	**16**		**4**	**2**	**2**	**6**	**6**	**20**	**14**
15:00 - 15:15	0	0	0	0	2	2	2		1	0	3	2	3	8	7
15:15 - 15:30	0	0	0	3	2	4	4		0	0	0	0	2	2	2
15:30 - 15:45	0	0	0	3	1	4	4		2	0	0	3	2	6	4
15:45 - 16:00	0	0	2	1	0	3	3		1	0	0	2	0	3	2
Hourly Total	**0**	**0**	**2**	**7**	**4**	**13**	**13**		**3**	**0**	**3**	**6**	**6**	**18**	**15**
16:00 - 16:15	3	0	2	0	1	6	3		2	0	1	2	1	5	3
16:15 - 16:30	2	0	0	2	3	6	4		4	0	0	2	2	8	3
16:30 - 16:45	1	0	0	1	2	3	3		4	0	1	2	1	8	3
16:45 - 17:00	1	0	0	0	0	1	0		3	0	0	0	0	3	0
Hourly Total	**7**	**0**	**2**	**3**	**5**	**16**	**9**		**13**	**0**	**2**	**5**	**3**	**23**	**10**
17:00 - 17:15	1	0	0	0	0	1	0		3	0	1	0	0	3	1
17:15 - 17:30	0	0	0	0	0	0	0		0	0	1	0	0	1	1
17:30 - 17:45	0	0	0	0	0	0	0		0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hourly Total	**1**	**0**	**0**	**0**	**0**	**1**	**0**		**3**	**0**	**2**	**0**	**0**	**4**	**2**
18:00 - 18:15	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:30 - 18:45	0	0	0	0	0	0	0		0	0	0	0	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0		0	0	0	0	0	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**			**0**	**0**	**0**	**0**	**0**	**0**	
TOTAL	**83**	**2**	**24**	**103**	**42**	**254**	**169**		**83**	**2**	**24**	**103**	**41**	**253**	**168**

In at Start					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
0	0	0	0	3	3

Accumulation					
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
0	0	0	0	3	3
0	0	0	0	3	3
0	0	0	4	3	7
0	0	0	5	2	7
0	0	0	14	3	17
0	0	0	3	2	5
0	0	0	4	2	6
0	0	0	3	1	4
0	0	0	2	2	3
0	0	0	3	1	3
0	0	0	1	1	2
0	0	2	4	1	7
0	0	1	6	1	8
0	0	1	3	1	4
0	0	0	3	0	3
0	0	2	3	1	6
0	0	1	3	1	5
0	0	0	3	1	3
0	0	1	6	2	9
0	0	1	3	1	5
0	0	0	4	1	5
0	0	1	3	1	5
0	0	0	3	1	3
0	0	1	2	2	4
0	0	1	1	2	3
0	0	2	1	4	7
0	0	0	3	2	4
0	0	0	3	3	5
0	2	1	2	0	4
0	1	1	3	1	6
0	0	2	0	3	4
0	0	3	2	3	8
0	0	0	0	3	3
0	0	0	3	3	5
0	0	0	3	2	5
0	0	2	3	2	6
0	0	3	1	2	5
0	0	3	1	3	6
0	0	2	0	3	5
0	0	2	0	3	5
0	0	1	0	3	4
0	0	0	0	3	3
0	0	0	0	3	3
0	0	0	0	3	3
0	0	0	0	3	3
0	0	0	0	3	3
0	0	0	0	3	3
0	0	0	0	3	3

0	0	0	0	3	3
PED	CYCLE	CAR	LGV	HEAVY	TOTAL
In at End					