

Ashburton - Chuley Road Masterplan



Masterplan Parking Strategy and Movement Assessment

January 2014

Design Principles – Parking

Chuley Road site and Town Centre Parking

This report presents the findings of an investigation into the optimum arrangement of town centre-wide parking with the development related to the Chuley Road masterplan in place.

Previous masterplan statements on parking issues and proposals were based on incomplete 'spot' site observations, but this work presents findings founded on the results of a parking survey undertaken by independent specialist survey sub-contractors on Saturday 7th September and Wednesday 11th September 2013, between 7am and 7pm.

Initial Masterplan design principles

At the outset of the wider masterplan team's work, a given stated objective was to achieve a net gain in parking supply through the masterplan development. However, we noted that along with such a gain, comes a measure of concern regarding any associated negative outcomes including increased town centre traffic movements associated with those spaces, and the possibility that those spaces will be quickly filled attracting further and 'new' parking demand.

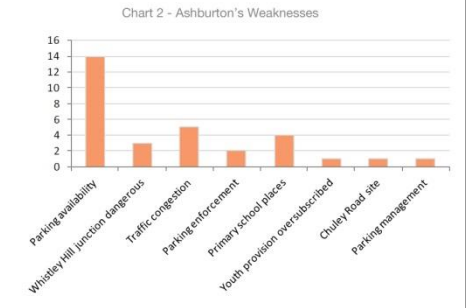
Our earlier work considered that the masterplan may therefore recommend the overarching design principle of encouraging a net increase in town centre parking **availability**, whereby provision of parking spaces within the site for town centre public use complement those in the wider town centre, with all spaces optimised in terms of stay durations and location to increase the likelihood of a space being available for occupation to motorists. This work tests that hypothesis using the collected survey data.

More precisely, it examines:

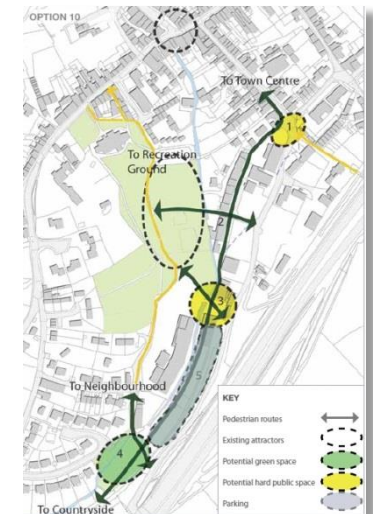
- The potential to release capacity lying within the town centre parking system through supply rationalisation
- The relationship between the Chuley Road masterplan site and the wider town centre parking supply
- What the optimum arrangement of parking may comprise, for example:
 - The encouragement of shorter stays and -higher space turnover within the town centre on-street and off-street parking supply
 - Dedicated short-term (only) parking provided for within the town centre shopping area
 - Long-term parking provided for at remoter points within the town centre (possibly at the southern end of Chuley Road)

First we present an appreciation of current parking conditions and behaviour.

Concerns with traffic congestion and pedestrian safety were key weakness identified, as well as a lack of parking availability throughout the town. The capacity of community facilities, including youth provision and the local primary school, to support new families was also a concern.



Parking – an identified town centre issue



Parking Supply

There are three main components to the town centre parking supply: on-street; formal, publicly run off-street; and private off-street.

Kingsbridge Lane car park

Kingsbridge Lane car park is the town's main off-street car park with 180 spaces available. It provides good quality off-street parking for a modest charge considering the town centre location, with long-stay parking encouraged by all day parking at £3.00, 3-5 hours for £2.00, and 1-3 hours for £1.00.

This tariff discourages space turnover, reducing the chances of short-stay visitors (e.g. less than 2hrs) finding a free space at peak times.

Town centre on-street

Within the town centre area (dotted line boundary) there is limited on-street provision due to narrow highway widths with some 83 spaces being laid out formally.

Chuley Road Site Area

Within the masterplan site there are a number of individual businesses with their own off-street parking provision totalling an estimated 170 spaces. The vast majority of this is non-formalised private parking and therefore precise parking space counting is not possible.

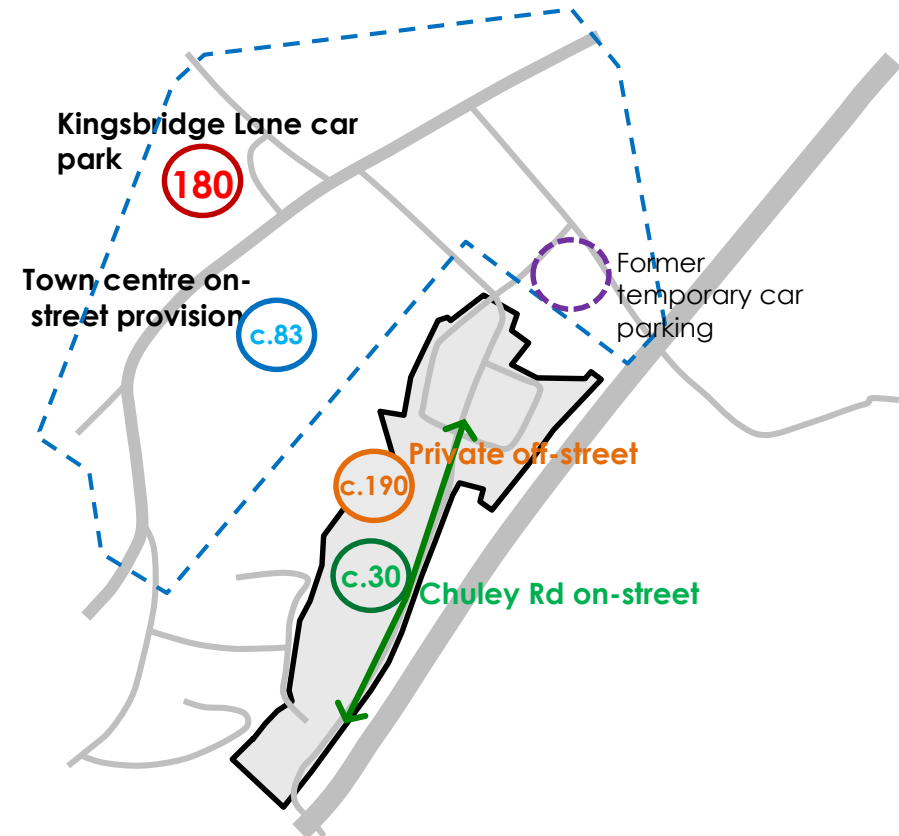
Public parking is available along the narrow Chuley Road a various points offering an estimated 30 (mostly unmarked) spaces along its length.

Temporary Parking Site

Until recently, motorists were temporarily able to park their vehicles informally on the then vacant Cattle Market development site on Vealenia Terrace which provided for approximately 75 spaces.

The site is currently being redeveloped, with some 20 new formal public parking spaces planned for provision following completion.

NB At the time of the surveys there was no parking possible on the Cattle Market site.



Parking Supply

On-street parking

A Restricted Parking Zone (RPZ) covers the heart of the town centre controlling on-street parking. An RPZ is simply a Controlled Parking Zone in effect, though the RPZ simply sets out where vehicles can park i.e. within marked bays, without recourse to yellow lines (particularly unhelpful in rural / historic streets) showing where they should not park.

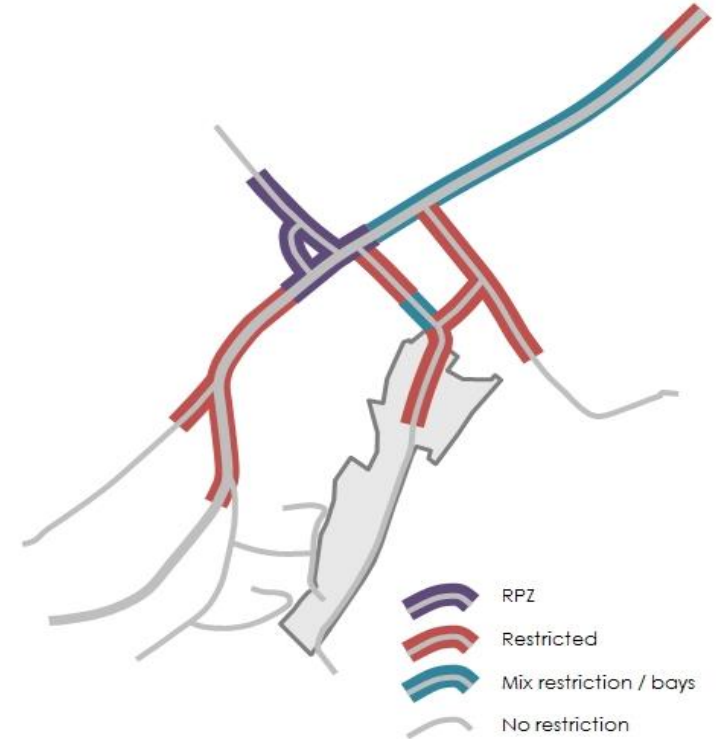
Most of the other streets in the town centre are restricted with a combination of single yellow / double yellow lines preventing daytime vehicle parking. This includes the northern end of Chuley Road in the masterplan site.

The southern section of St Lawrence Lane, North Street and East Street have some on-street parking bays but these are limited in number. Where bays are provided they appear well-used, though with some concern over the length of stay of some vehicles in them.

Elsewhere there are no restrictions to on-street parking. This includes Chuley Road as it passes through the masterplan site where unmanaged on-street parking occurs.

Kerbside parking

Though convenient for access to frontages, for the most part this kerbside parking exacerbates the impact of the narrow streets, adding to access difficulties and congestion. It also makes some streets more difficult to cross for pedestrians, and in some instances detracts from street appearance, obscuring the generally otherwise very attractive streetscape.



Wider parking issues/considerations

Increasing town centre parking availability

There is an expressed desire for a net increase in publicly available parking provision as a result of the masterplan. The achievement of this will though depend on a number of factors:

- Whether currently available parking areas are developed over, without equivalent reprovision
- Whether further provision can be accommodated within the site without compromising wider masterplan objectives
- The extent to which current ad-hoc public parking would be reprovided within the new development.

Along with the generally positive addition of parking capacity, there may be some negative aspects to this desired net parking increase:

- For each additional space provided come at least two additional vehicle movements on the constrained local road network
- The additional parking will not necessarily mean that parking demand is satisfied – greater parking and movement demand may follow the addition of greater supply
- Parking spaces occupy valuable land that could be put to other uses, such as green space or additional development.



Chuley Road on-street parking

Parking – a site sensitive increase

In order to minimise adverse impacts of on-site publicly available parking provision, four possibilities are worthy of further examination:

- Formal long-stay town centre public parking located at the southern end of the site – ie in the more difficult to use area of flood plain
- Implementation of Shared Space running as a spine road through the site – parking could be located within this area, within subtly marked areas, to reprovide current Chuley Road ad-hoc parking, and possibly increase it in number without undue, adverse amenity impact
- Parking areas may be shared between developments where demand for that space occurs mainly during different parts of the day – identifying those possible uses and parking areas will help to minimise needed on-site parking provision
- Rationalising town centre supply – see below.

The site already forms part of the existing town centre parking supply, and as such the masterplan development will change the dynamics of the town-wide parking system. In planning the site, there is the opportunity to demonstrate how a better town centre parking management system could result too, which importantly, will help minimise public parking provision on-site.



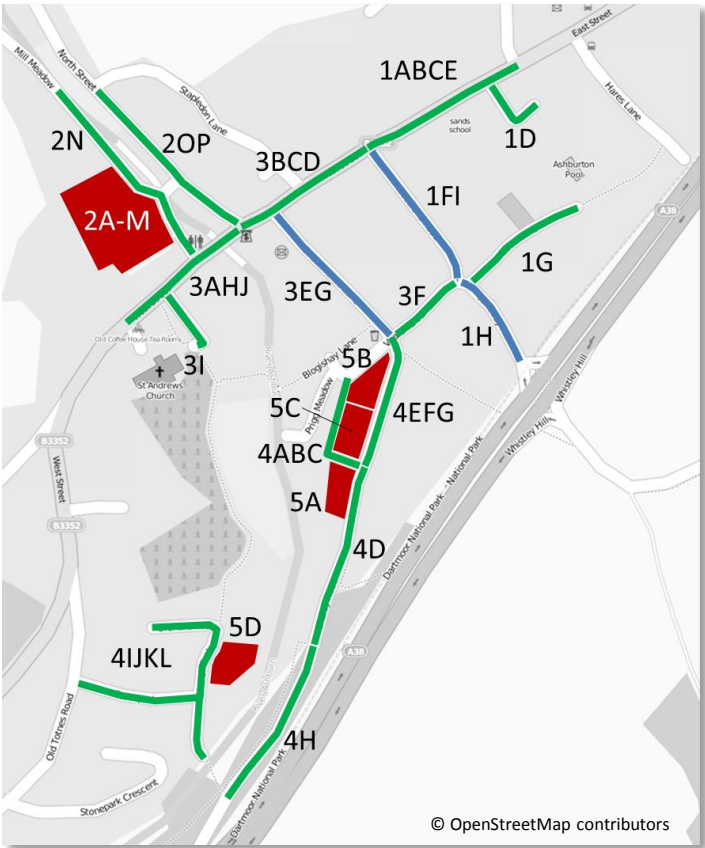
Development considerations

Establishing present parking use

Our initial investigations identified a system apparently out of balance with current demands - with short-stay off-street and on-street town centre parking available to medium and long-stay motorists either through the low car park tariff, or the lack of on-street charges to ration precious kerbside space usage.

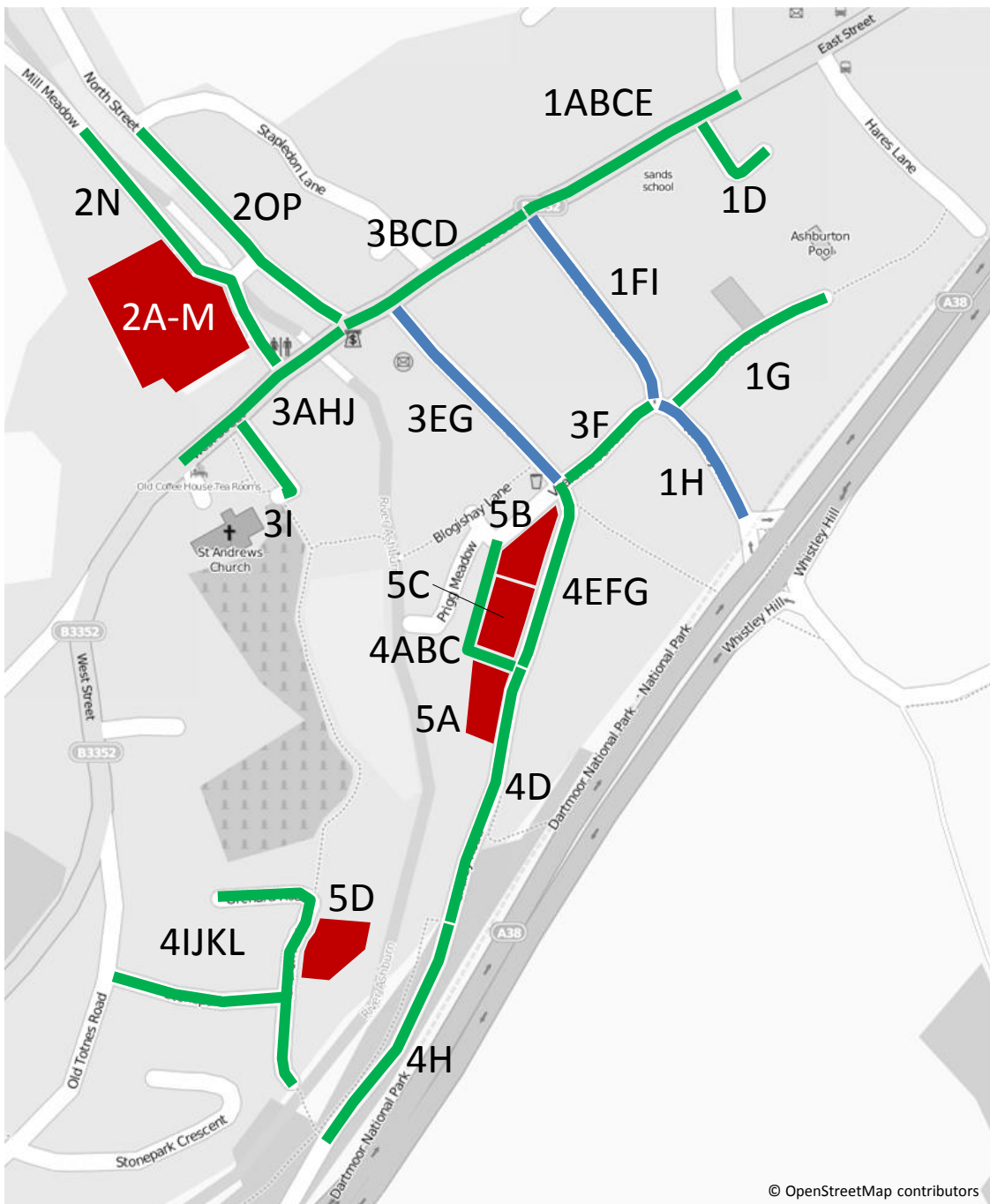
In order to determine the optimum future parking arrangement to deliver increased parking availability, we needed a more robust view of current behaviour and numbers through a parking duration (or 'beat') survey of the site. As the site is part of the wider town centre parking system, it covered the wider town centre provision too in order to assess the current contribution to parking demand made by the site, and the desirable level of future provision within the masterplan site.

However, this work does not attempt to give definitive numbers for transferred or additional parking spaces following the masterplan site development 'opening' as the volume of parking required and masterplan site content and layout are interdependent. This work though does feed directly into that design process and will inform both site content and layout – as earlier work has done.



Surveyed town centre streets
See next page for further detail

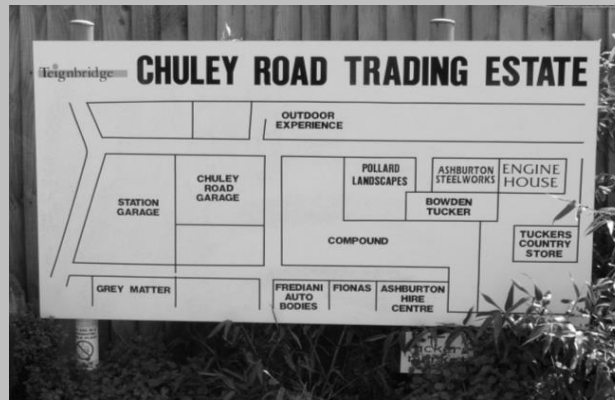




Parking Survey Zones + Streets

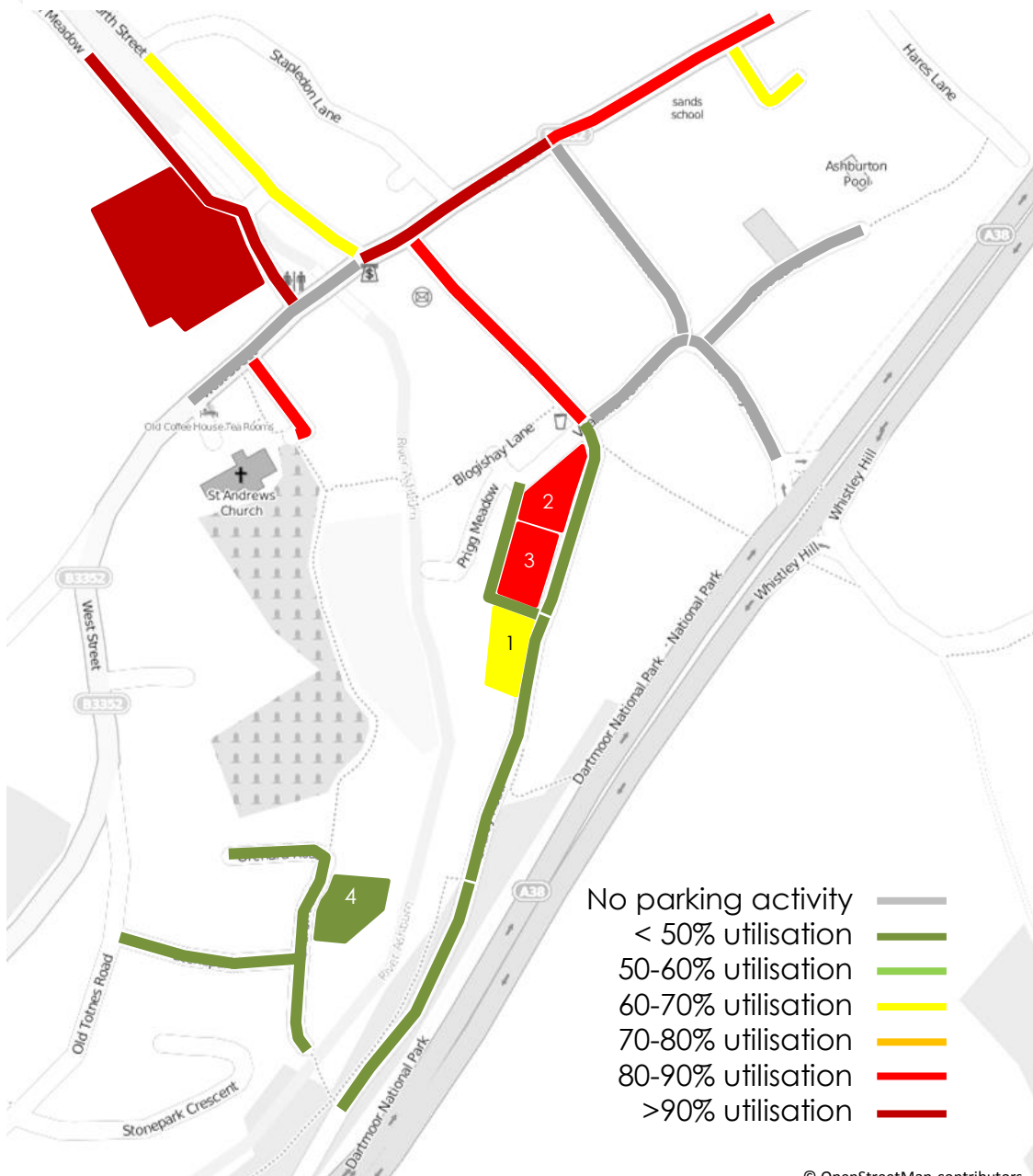
1ABCE	East St (east of St Lawrence Lane)
1D	Golden Lion Court
1FI	Woodland Road
1G	Love Lane
1H	Whistley Hill
2A-M	Kingsbridge Lane Car Park
2N	Ash Close
2OP	North St
3AHJ	West St
3BCD	East St (west of St Lawrence Lane)
3EG	St Lawrence Lane
3F	Vealenia Terrace
3I	St Andrews Close
4ABC	Private road
4D	Chuley Road (south of private road)
4EFG	Chuley Road (north of private road)
4H	Chuley Road (towards A38)
4IJKL	Stonepark and Church Path
5A	Car park (south of private road)
5B	Car park (nearest Vealenia Terrace)
5C	Car park (north of private road)
5D	Tuckers car park

Parking Survey Findings



Masterplan Parking Strategy

Parking Space Utilisation (average) - Weekday

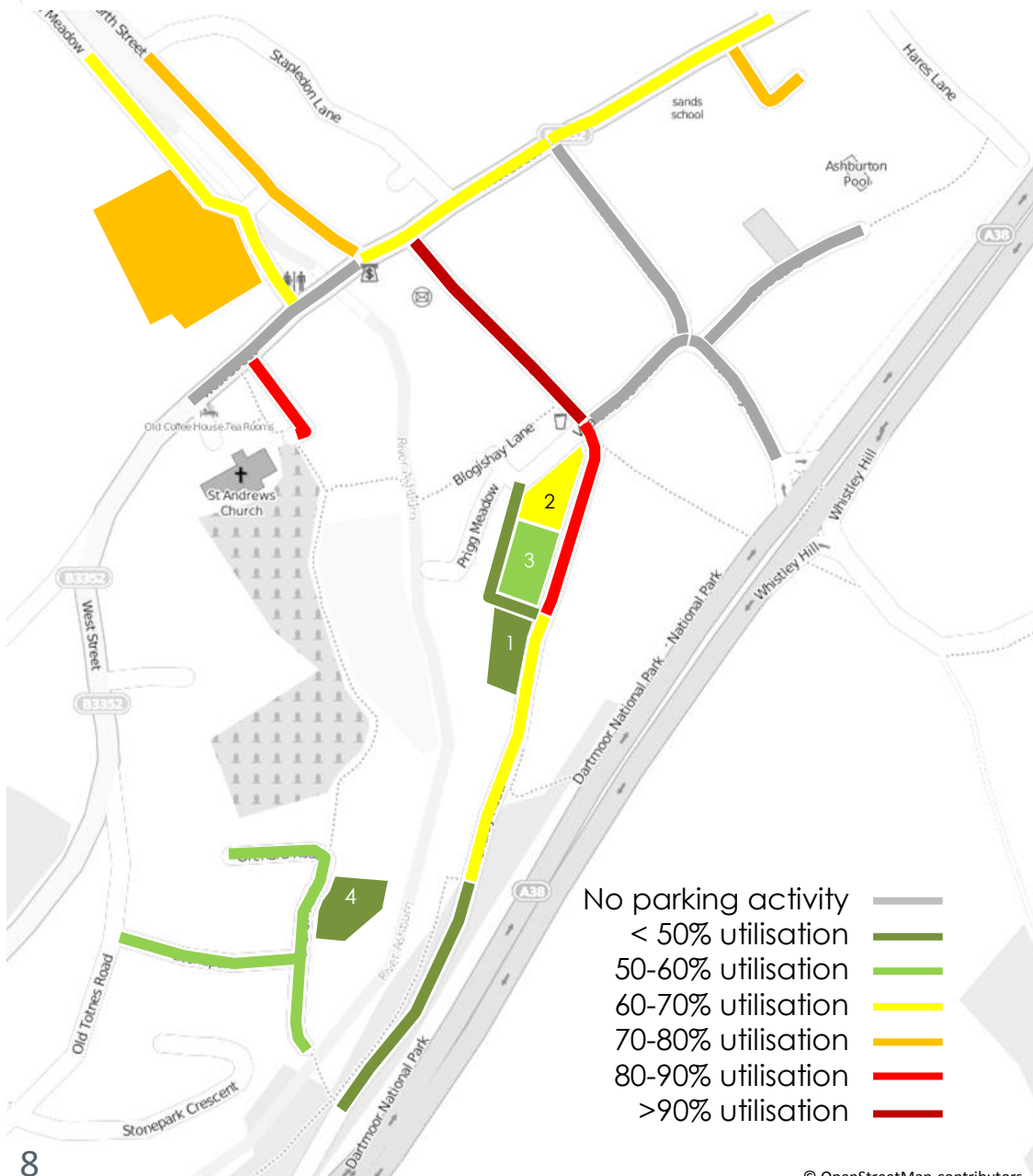


Headline findings

- Strong utilisation of Kingsbridge Ln car park
- Town centre streets well used where parking permitted
- St Lawrence Ln high utilisation
- Chuley Rd parking on-street at medium utilisation levels
- Strong use of Chuley Rd car parks
- Tuckers parking at modest utilisation level

East St (east of St Lawrence Lane)	85%
Golden Lion Court	63%
Woodland Road	n/a
Love Lane	n/a
Whistley Hill	n/a
Kingsbridge Lane Car Park	92%
Ash Close	100%
North St	62%
West St	n/a
East St (west of St Lawrence Lane)	90%
St Lawrence Lane	86%
Vealenia Terrace	n/a
St Andrews Close	84%
Private road	39%
Chuley Road (south of private road)	15%
Chuley Road (north of private road)	48%
Chuley Road (towards A38)	31%
Stonepark and Church Path	43%
1. Car park (south of private road)	67%
2. Car park (nearest Vealenia Terr.)	85%
3. Car park (north of private road)	85%
4. Tuckers car park	20%
N.B. Utilisation %	
= tot parked vehicles ÷ tot spaces	
excl. single/double yellow lines)	

Parking Space Utilisation (average) - Saturday

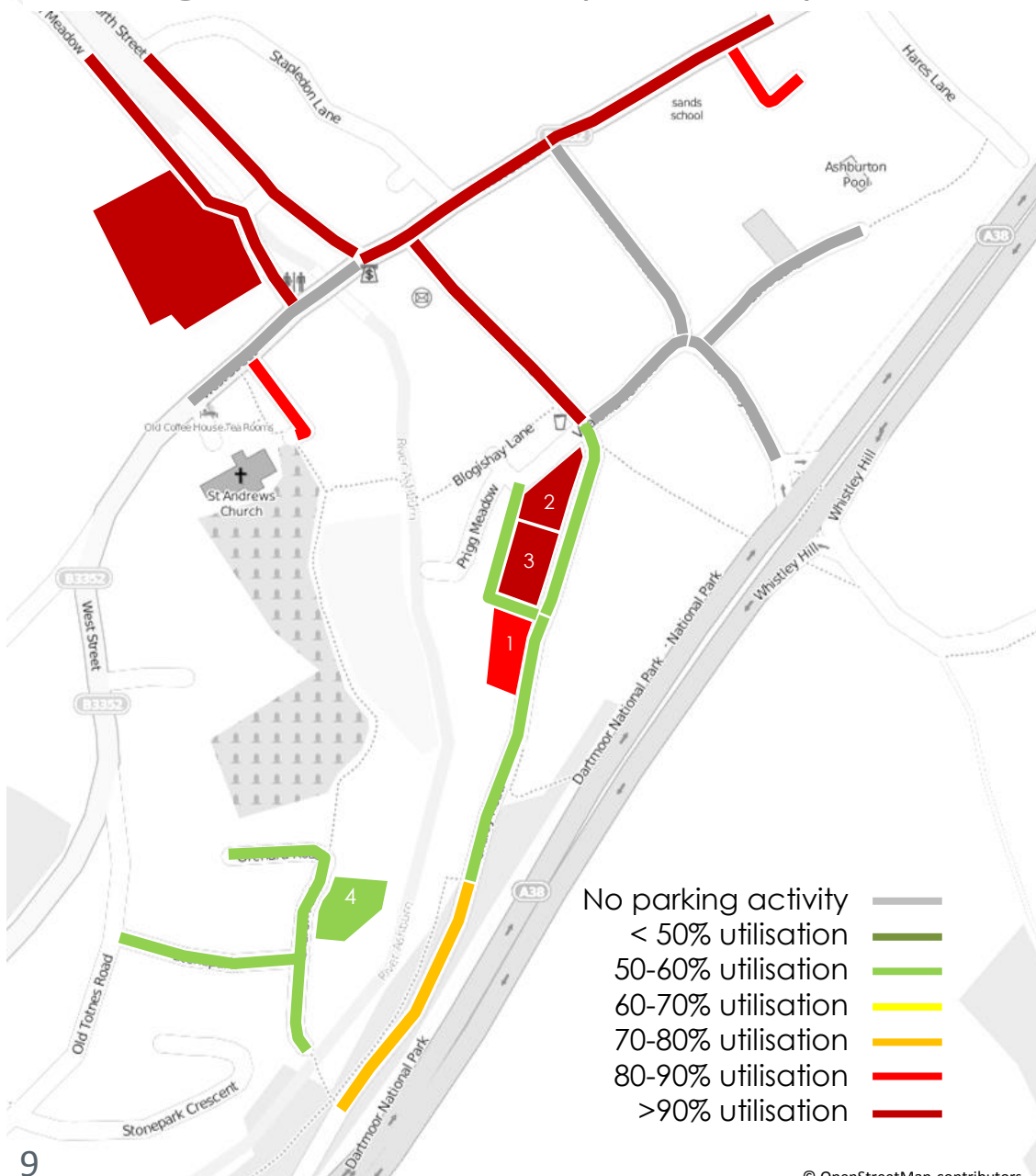


Headline findings

- Kingsbridge Ln car park well used, but offers some capacity
- Town centre streets also offer some modest capacity where parking permitted
- Chuley Rd car parks substantially lower use than weekday
- Tuckers parking offers capacity for shoppers
- Chuley Rd (on-street) parking usage lower than weekday levels
- St Lawrence Ln high utilisation
 - except for northern section where more intensive use

East St (east of St Lawrence Lane)	62%
Golden Lion Court	76%
Woodland Road	n/a
Love Lane	n/a
Whistley Hill	n/a
Kingsbridge Lane Car Park	76%
Ash Close	66%
North St	73%
West St	n/a
East St (west of St Lawrence Lane)	68%
St Lawrence Lane	99%
Vealania Terrace	n/a
St Andrews Close	87%
Private road	43%
Chuley Road (south of private road)	63%
Chuley Road (north of private road)	84%
Chuley Road (towards A38)	33%
Stonepark and Church Path	56%
1. Car park (south of private road)	13%
2. Car park (nearest Vealania Terr.)	57%
3. Car park (north of private road)	62%
4. Tuckers car park	36%
N.B.	
Utilisation % = tot parked vehicles ÷ tot spaces excl. single/double yellow lines	

Parking Space Utilisation (maximum) - Weekday

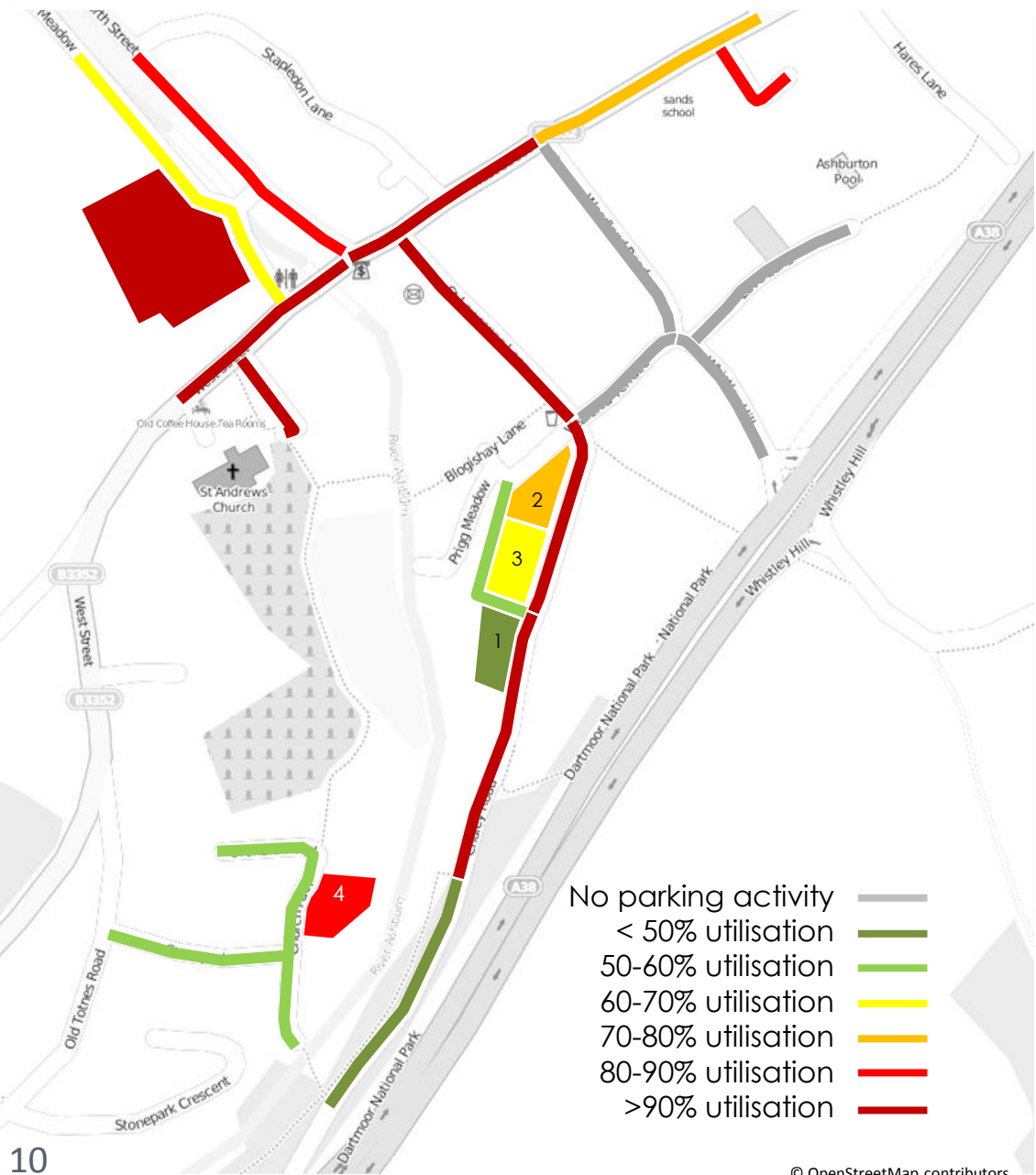


Headline findings

- Similar overall usage levels to 'average' utilisation
- Intensive peak usage on:
 - North St
 - East St
 - St Lawrence Ln
- Some intensification on Chuley Rd private car parks, and North St

East St (east of St Lawrence Lane)	111%
Golden Lion Court	73%
Woodland Road	n/a
Love Lane	n/a
Whistley Hill	n/a
Kingsbridge Lane Car Park	99%
Ash Close	100%
North St	94%
West St	n/a
East St (west of St Lawrence Lane)	133%
St Lawrence Lane	100%
Vealenia Terrace	n/a
St Andrews Close	89%
Private road	50%
Chuley Road (south of private road)	50%
Chuley Road (north of private road)	50%
Chuley Road (towards A38)	77%
Stonepark and Church Path	59%
1. Car park (south of private road)	86%
2. Car park (nearest Vealenia Terr.)	100%
3. Car park (north of private road)	93%
4. Tuckers car park	50%
N.B. Utilisation % = tot parked vehicles ÷ tot spaces excl. single/double yellow lines)	

Parking Space Utilisation (maximum) - Saturday

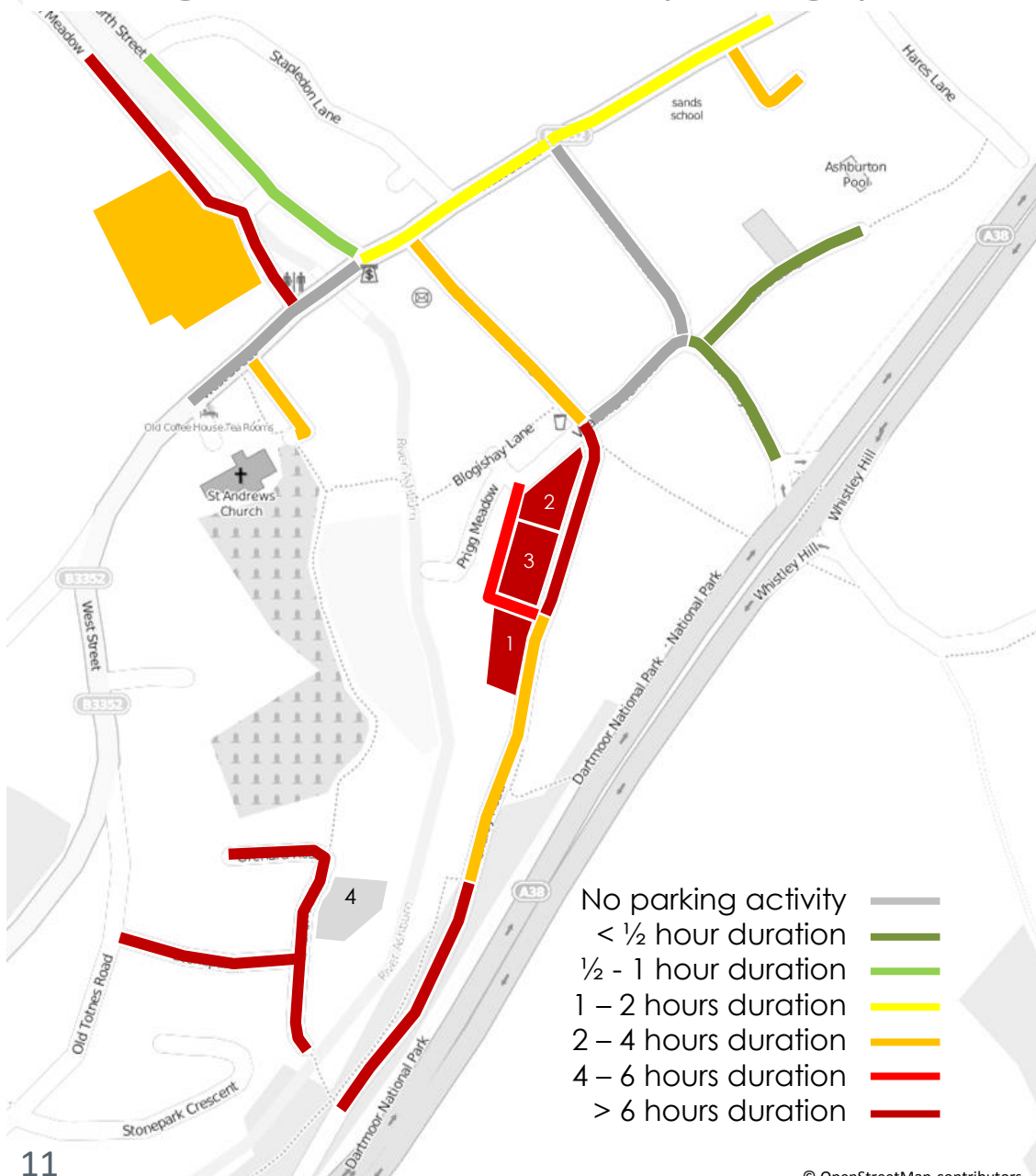


Headline findings

- Kingsbridge Ln car park full
- Town centre streets work harder in providing parking at peak times for town centre activity
- St Lawrence Ln high utilisation
- Chuley Rd (on-street) parking activity intense at peak times
 - Intensity lower in southern section
- Chuley Rd car park usage remains similar to average levels
- Tuckers car park busy at peak times

East St (east of St Lawrence Lane)	75%
Golden Lion Court	86%
Woodland Road	n/a
Love Lane	n/a
Whistley Hill	100%
Kingsbridge Lane Car Park	98%
Ash Close	67%
North St	94%
West St	n/a
East St (west of St Lawrence Lane)	117%
St Lawrence Lane	100%
Vealenia Terrace	n/a
St Andrews Close	100%
Private road	54%
Chuley Road (south of private road)	100%
Chuley Road (north of private road)	93%
Chuley Road (towards A38)	46%
Stonepark and Church Path	65%
1. Car park (south of private road)	16%
2. Car park (nearest Vealenia Terr.)	70%
3. Car park (north of private road)	63%
4. Tuckers car park	80%
N.B.	
Utilisation % = $\frac{\text{tot parked vehicles}}{\text{tot spaces excl. single/double yellow lines}}$	

Parking Space Stay Duration (average) - Weekday



Headline findings

- Kingsbridge Ln car park used for stays up to medium / long length
- East Street durations of sort-medium length
- St Lawrence Ln med-long durations for this town centre street
- Med- long stay durations on Chuley Rd on-street
 - longer stays at northern and southern sections
- Long stays in Chuley Rd car parks
- Long stays at Stonepark and Church Path

Location	Av. duration hrs:mins
East St (east of St Lawrence Lane)	1:30
Golden Lion Court	2:05
Woodland Road	n/a
Love Lane	0:15
Whistley Hill	0:15

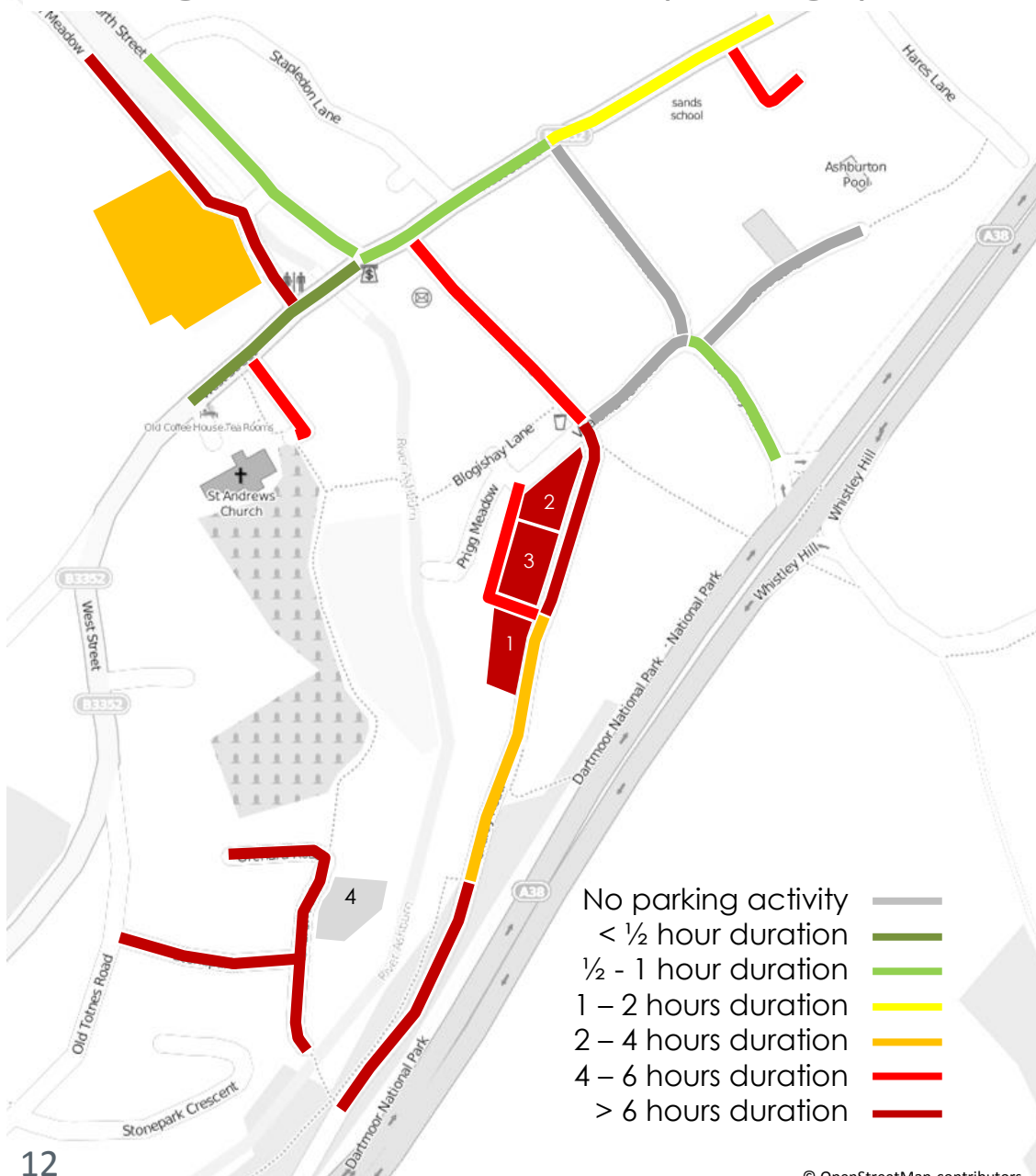
Kingsbridge Lane Car Park	2:50
Ash Close	10:00
North St	0:45

West St	1:15
East St (west of St Lawrence Lane)	1:05
St Lawrence Lane	3:25
Vealenia Terrace	n/a
St Andrews Close	3:50

Private road	4:05
Chuley Road (south of private road)	3:15
Chuley Road (north of private road)	6:25
Chuley Road (towards A38)	8:10
Stonepark and Church Path	6:40

Chuley Rd Car Parks:	Main parking duration characteristics
Car park (south of private road)	High occup. & long stay – 'staff'
Car park (nearest Vealenia Terr.)	Early hours/high occup. & v. long stay
Car park (north of private road)	Early hours/high occup. & v. long stay
Tuckers car park	Short stay 'shoppers'

Parking Space Stay Duration (average) - Saturday



Headline findings

- Kingsbridge Ln car park used for stays up to medium / long length
- St Lawrence Ln med-long durations for this town centre street
- East Street durations of short-medium length
- Short stays on North Street
- Med- long stay durations on Chuley Rd (on-street)
 - longer stays at northern and southern sections
- Long stays in Chuley Rd car parks
- Long stays at Stonepark and Church Path

Location	Av. duration (hrs:mins)
East St (east of St Lawrence Lane)	1:15
Golden Lion Court	3:35
Woodland Road	n/a
Love Lane	n/a
Whistley Hill	0:45

Kingsbridge Lane Car Park

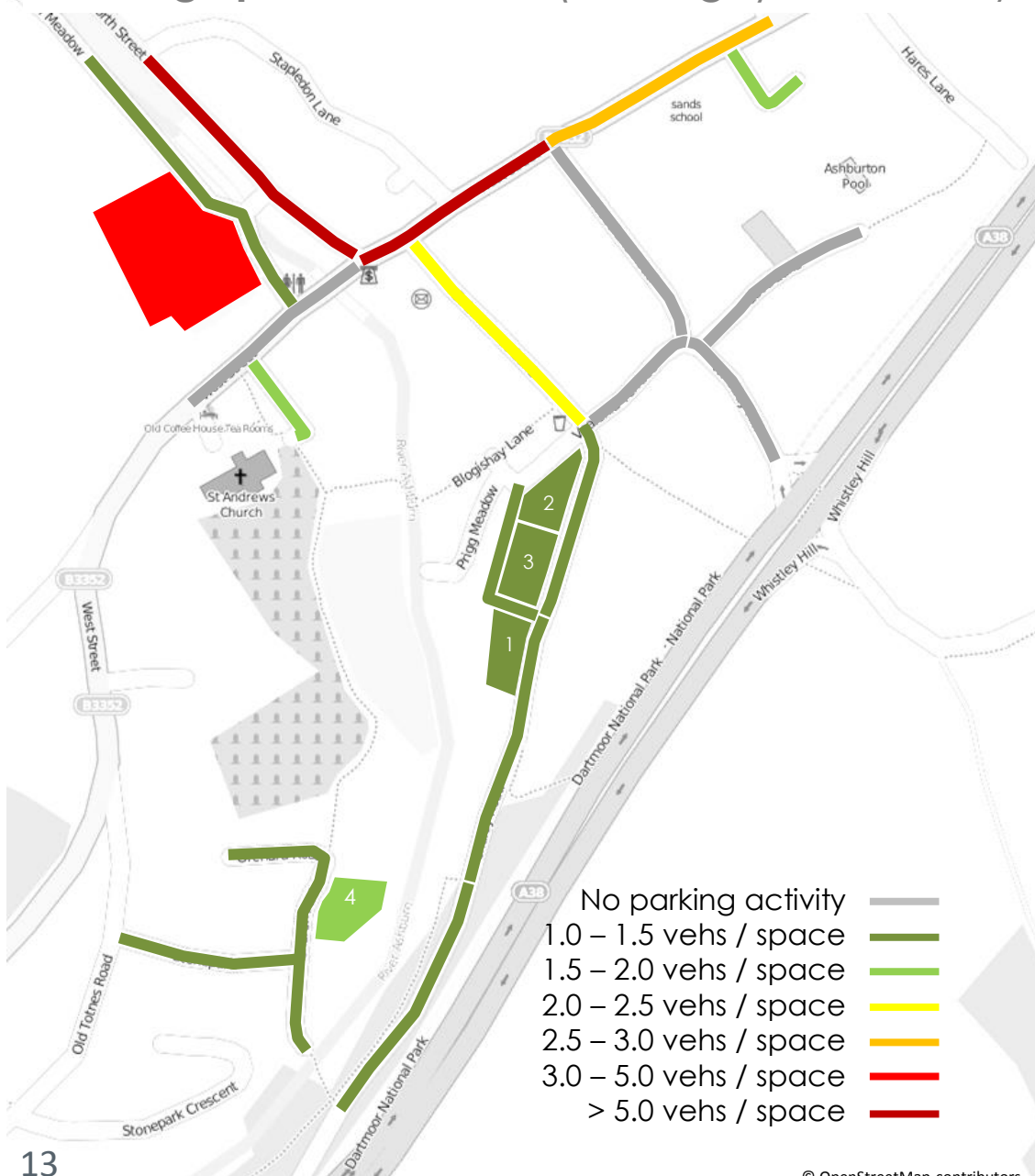
Ash Close	6:05
North St	0:35

West St	0:15
East St (west of St Lawrence Lane)	0:40
St Lawrence Lane	3:45
Vealania Terrace	n/a
St Andrews Close	4:15

Chuley Road Site	
Private road	5:30
Chuley Road (south of private road)	2:45
Chuley Road (north of private road)	6:05
Chuley Road (towards A38)	6:30
Stonepark and Church Path	8:00

Chuley Rd Car Parks:	Main parking duration characteristics
1. Car park (south of private road)	Low occupancy & long stay
2. Car park (nearest Vealania Terr.)	Early hours occupancy & long stay
3. Car park (north of private road)	Early hours occupancy & long stay
4. Tuckers car park	Short stay 'shoppers'

Parking Space Turnover (average) - Weekday



Headline findings

- Kingsbridge Ln car has medium turnover rate for this town centre convenience amenity
- High turnover on North Street
- Generally good turnover of spaces on East St (east of North St)
- St Lawrence Ln low space turnover
- Very low turnover on Chuley Rd on-street
- Very low turnover within Chuley Rd car parks

East St (east of St Lawrence Lane)	2.5
Golden Lion Court	1.7
Woodland Road	n/a
Love Lane	n/a
Whistley Hill	n/a

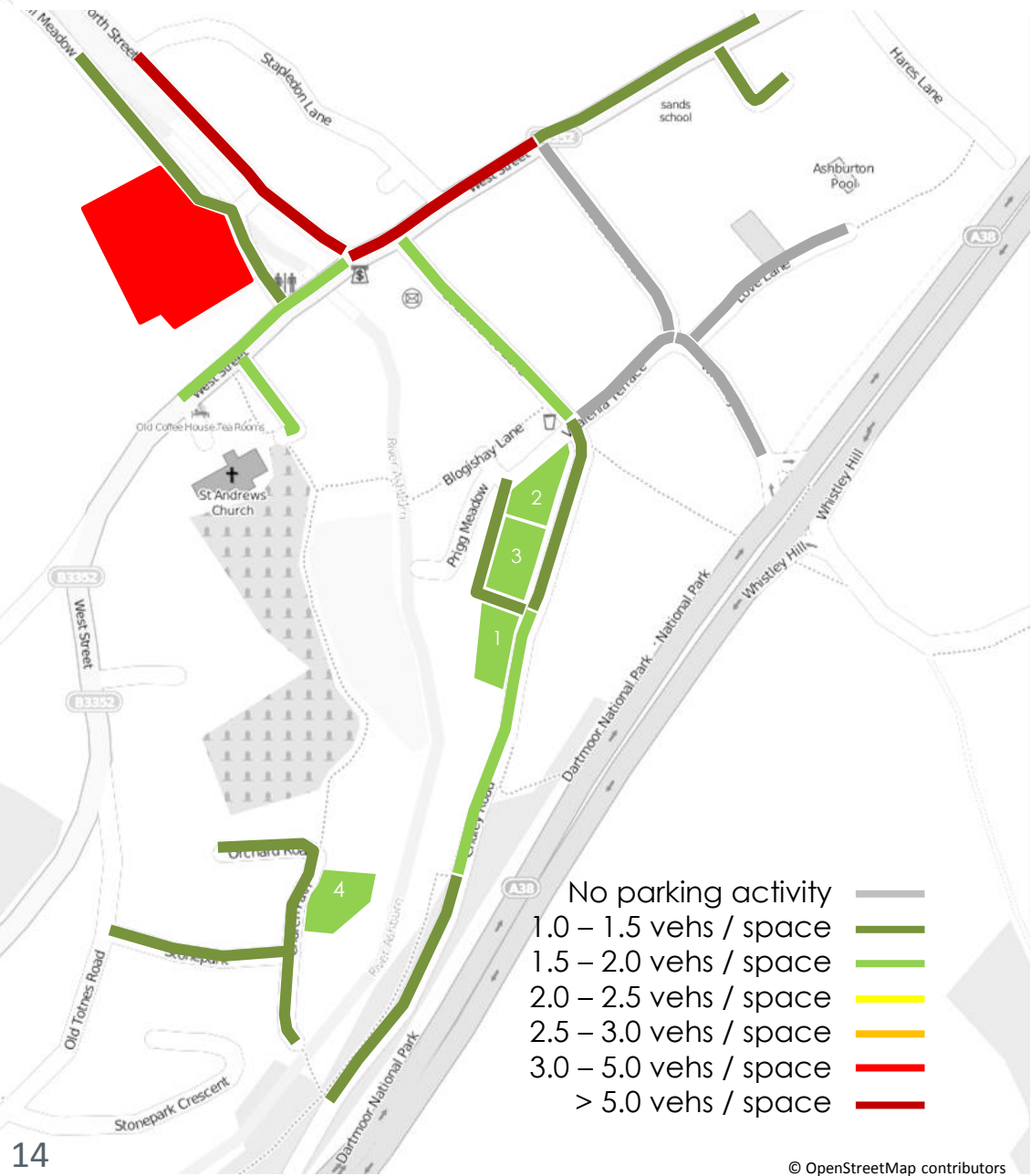
Kingsbridge Lane Car Park	3.6
Ash Close	1.2
North St	5.4

West St	n/a
East St (west of St Lawrence Lane)	5.2
St Lawrence Lane	2.1
Vealena Terrace	n/a
St Andrews Close	1.9

Private road	1.5
Chuley Road (south of private road)	1.5
Chuley Road (north of private road)	1.5
Chuley Road (towards A38)	1.4
Stonepark and Church Path	1.1

Car park (south of private road)	≈ 1.1
Car park (nearest Vealena Terr.)	≈ 1.2
Car park (north of private road)	≈ 1.3
Tuckers car park	≈ 1.8

Parking Space Turnover (average) - Saturday



Headline findings

- Low turnover throughout, with three notable exceptions
 - Kingsbridge Lane – medium turnover
 - North Street – high turnover
 - East St (between North St & Woodland Rd)

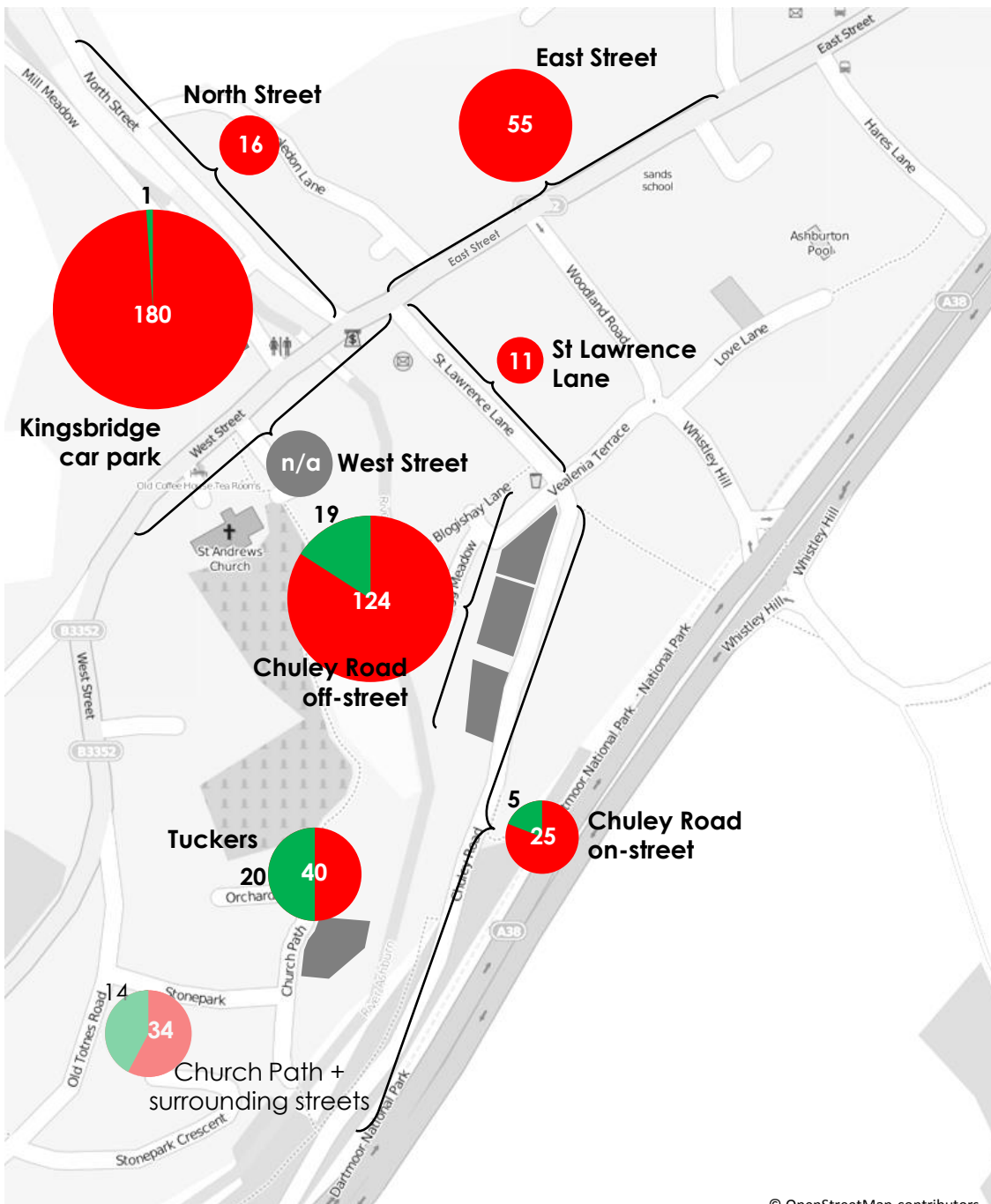
East St (east of St Lawrence Lane)	1.5
Golden Lion Court	1.2
Woodland Road	1.5
Love Lane	n/a
Whistley Hill	n/a

Kingsbridge Lane Car Park	3.1
Ash Close	1.3
North St	6.8

West St	n/a
East St (west of St Lawrence Lane)	5.7
St Lawrence Lane	1.6
Vealenia Terrace	n/a
St Andrews Close	1.6

Private road	1.1
Chuley Road (south of private road)	1.6
Chuley Road (north of private road)	1.2
Chuley Road (towards A38)	1.0
Stonepark and Church Path	1.0

Car park (south of private road)	≈ 1.3
Car park (nearest Vealenia Terrace)	≈ 1.2
Car park (north of private road)	≈ 1.0
Tuckers car park	≈ 1.3

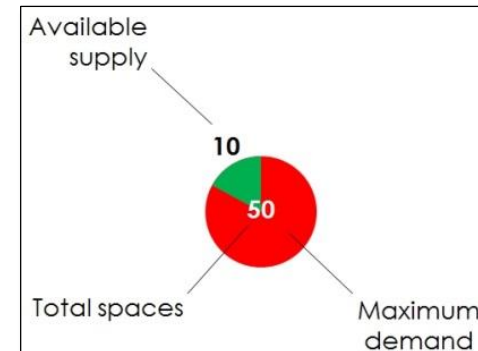


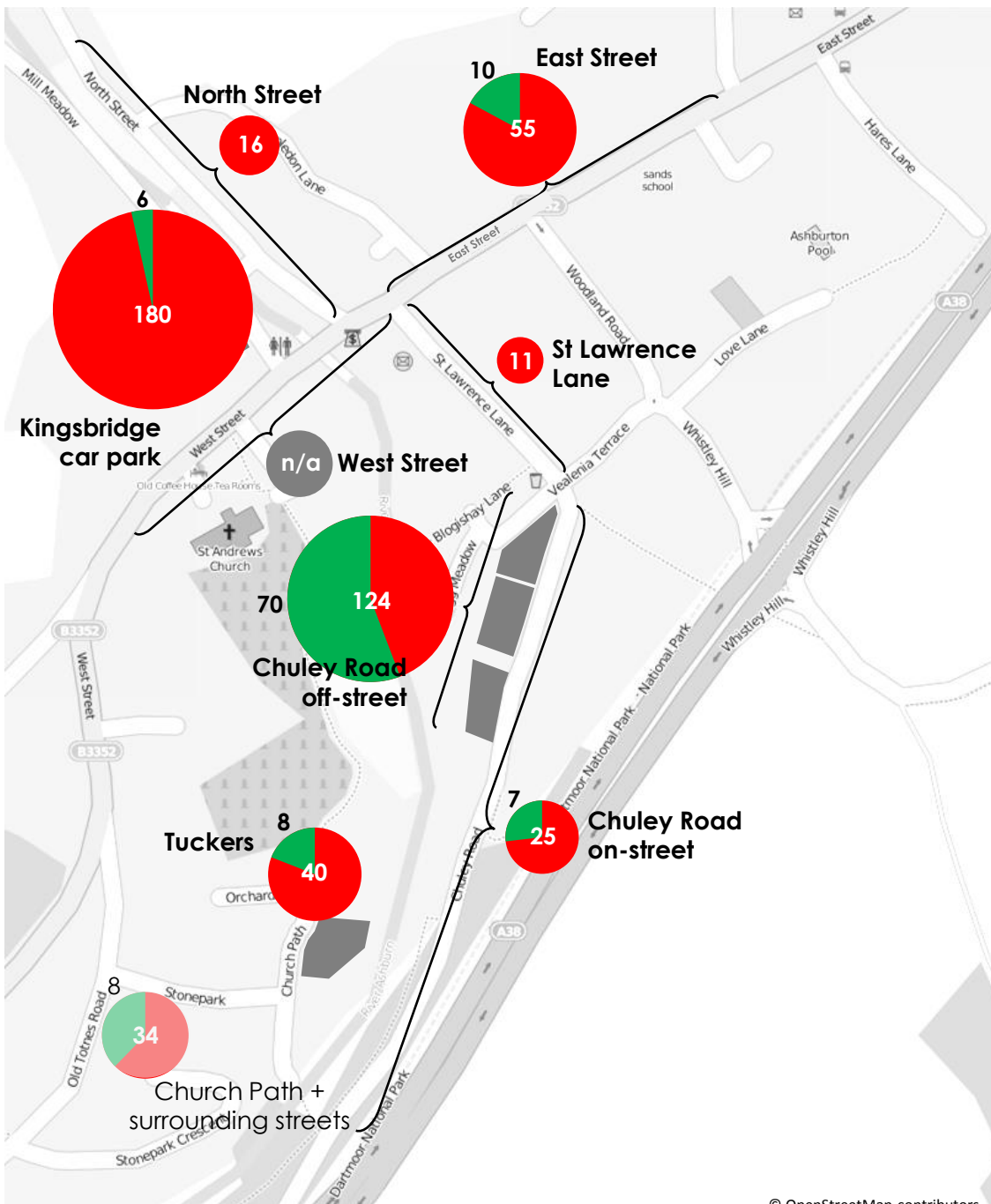
Weekday - maximum space demand

Headline findings

N.B. **Weekday** findings presented here – Saturday overleaf

- Kingsbridge Ln car park full
- All town centre streets fully occupied
- Chuley Rd (on-street) some capacity available
- Chuley Rd car parks approx. 80% full
- Tuckers parking offers capacity for shoppers

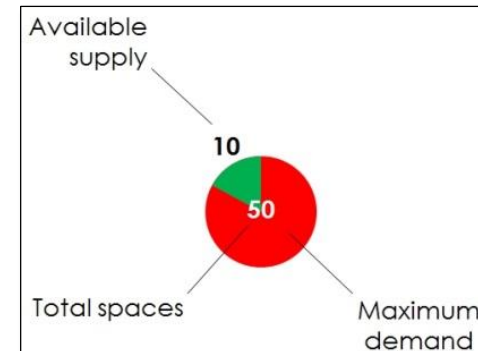




Saturday - maximum space demand

Headline findings

- Kingsbridge Ln car park full (effectively)
- Some parking spaces available on-street on East Street
- St Lawrence Lane fully occupied
- Chuley Rd (on-street) offers some parking space
- Chuley Rd car parks less than half full
- Tuckers parking offers capacity for shoppers



Overall Parking Survey Summary (see over for commentary)

Car Park	Location			Duration			Utilisation of spaces			Turnover of Spaces			Available Spaces (Sat, max)	
	Town centre	Edge of town centre	Remote	Long	Med	Short	High	Med	Low	High	Med	Low	Some	None
Kingsbridge Ln														
	Hub location - high convenience Good shoppers car park Tariff operating, enables space rationing			Long/med stay use sub-optimum for this facility Short-stay (30-90min) use preferable			High utilisation as long & med stay			Med turnover only - restricts pkg opportunities for users			Space could become available if wider system managed accordingly	
North Street														
	Good convenient shoppers/visitors location			Short stays appropriate for this town centre location						Good turnover - appropriate for location			Space could become available if wider system managed accordingly	
East Street														
	Good convenient shoppers/visitors location			Short stay durations supportive of for High St activities			High utilisation good for this convenient location			High turnover to west Appropriate for this High St				
St Lawrence Ln														
	In-between location handy for town centre shopping, but mainly used by residents / businesses			Access to this convenient town centre supply rendered unavailable by long-term resident / business parking			Street highly parked-up restricts available roadspace for traffic movements			Low - reflective of long-term resident and business use			Effectively a non-option for town centre visitors	
Chuley Rd carriageway Northern section														
	Within town centre walking distance Finds use for long-term parking			Location better as short-term supply Length of stay suggests business use			Available spaces informally marked and inconvenient to use			Section used for long-stay parking				
Chuley Rd carriageway Southern section														
	Used for long-stay parking Within town centre walking distance			Good use for this remote location			Space usage is sporadic			Low turnover reflective of long-stay use				
Chuley Rd Car Parks (private)														
	Useful location for short-term use for town centre			Long-term use consistent with business related activity						Low turnover reflective of long-stay use				

KEY

	Generally favourable observation / characteristic
	Observation / characteristic with positive & negative characteristics
	Generally un -favourable observation / characteristic
	Observation only

Overall Parking Survey Summary

The findings and conclusions presented here relate to the weekday and Saturday situations, and in general terms, both are similar, with the following characteristics.

Parking space utilisation:

- Town Centre - Generally higher use on weekday, on-street and off-street
 - Higher peak utilisation levels on weekday
- Chuley Rd
 - higher on-street utilisation on Saturday
 - lower off-street utilisation on Saturday

Demand for parking spaces:

- Similar overall demand on weekday and Saturday
- Off-street supply used less on Saturday
- East St well-used on weekday
- Kingsbridge very well used (full) on weekday and Saturday

Duration of parking stays:

- Very similar throughout the town centre and Chuley Rd on both days

Parking space turnover:

- Very low space turnover on both days
- Low turnover on East Street on both days
- Relatively low turnover weekday and Saturday at Kingsbridge Ln car park – i.e. for a town centre public car park

Other more specific observations:

Kingsbridge Lane car park – this centrally located amenity is very well used, and clearly popular, but exhibits only modest turnover meaning that space availability is lower than expected, even though capacity would otherwise appear sufficient for Ashburton town centre visitors.

North Street – operating well in providing convenient and efficient short-stay (<60 min) on-street parking. Probably over-working in making up for the lack of similar supply elsewhere in the vicinity (e.g. Kingsbridge Ln car park, St Lawrence Ln), as demonstrated by lack of space availability.

East Street – similar to North Street, though stay durations tend to lie between short-medium term as we move east along the street, i.e. further from the town centre activity.

St Lawrence Lane – though convenient for the town centre, and clearly subject to some opportunistic visitor parking, we see mostly medium to long-stay parking here, probably by residents and businesses given the long stay durations observed. This parking though effectively narrows the carriageway to a single lane, causing single, alternate line working, delaying access for local people and visitors alike.

Chuley Road on-street (northern section) – used for med-long-term parking, perhaps by those otherwise seeking space nearer to the town centre on a Saturday, but content to park in this location for longer stay parking given the short walk involved. It is possible some are displaced St Lawrence Ln residents.

Chuley Road on-street (southern section) – home to long-stay parking with very low space turnover, this location is walkable for the town centre, and if better laid out for parking could see greater use.

Chuley Road car parks – compared to weekday use, these car parks are less intensively used though still home to long-stay use, most likely related to weekend commercial use, as evidenced by the low space turnover.

Parking Strategy Principles

Town Centre and Masterplan Area parking

Although clearly under pressure at peak times, town centre visitors generally observe posted parking regulations and little indiscriminate parking has been observed. Given the recent loss of the temporary parking on the former Cattle Market site, we may have expected to find clear evidence of more congested conditions.

It is of course acknowledged that in this location, use of private cars will remain important for many given the inherent difficulties of providing alternative public travel modes throughout rural areas. As such, the strategy seeks to provide additional parking spaces within the masterplan area in order to:

- Provide a better level of service for users
- Provide for usage variations – for example, during local festivals
- Provide for masterplan site related activities.

There is a clear opportunity for the wider town centre to benefit from the peak car parking capacity provided for masterplan staff, visitor and commercial parking during the quieter weekend periods – as evidenced by the parking survey data.

Parking and access movements

The level of parking provided should though be managed carefully as with each space comes a related two-way access movement using town centre roads. Accordingly, the masterplan site should aim to provide a flexible parking space initially – one which can expand and contract in relation to outturn parking activity.

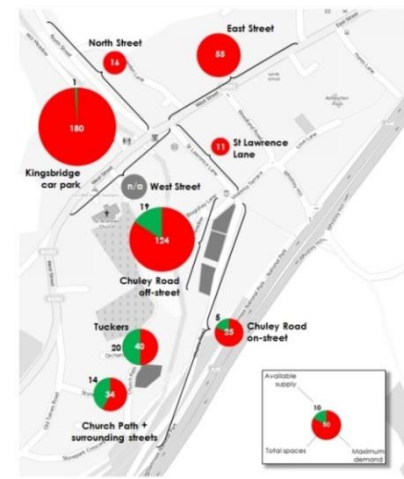
The capacity of that car park should though be capped such that the town centre vehicle movements associated with those spaces are kept within manageable proportions. This report later presents the results of an associated survey of traffic movements in the masterplan site vicinity and demonstrates that present movements are low in number, doubtless constrained by the narrow carriageways in general, and kerbside parking (St Lawrence Lane).

All movements (2-way combined) as recorded entering via Woodland Rd+Whistley Hill+St Lawrence Lane

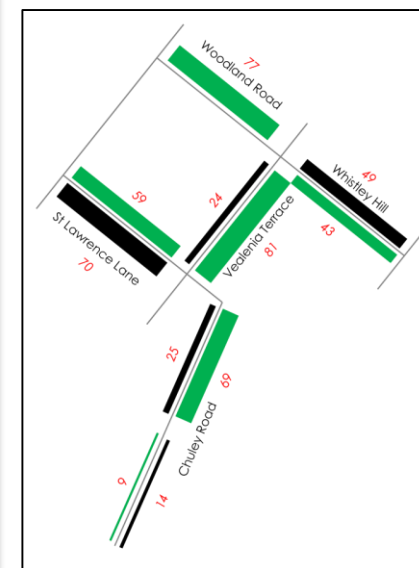
Morning peak (8-9am) **IN** = 189 **OUT** = 132

Evening peak hour (5-pm) **IN** = 102 **OUT** = 185

Though low in absolute terms (approx. between 1-2 vehicles/min), the width constrained local roads mean that those numbers may result in a disproportionate impact on local amenity. They do however offer the prospect of offering a degree of capacity for additional masterplan traffic flows relating to parking activity.



Town centre parking survey extract



Surveyed traffic flows - extract

Parking Strategy Principles

Parking reallocation – approach

At the time of writing, the more specific content and scale of masterplan content remains under development. Accordingly, this strategy approaches the provision and rationalisation of town centre parking from the standpoint of:

- *Accepting additional masterplan-related parking activity will result from the proposals and accounting for it in general terms given known proposals*
- *That the present town centre parking supply will benefit from reorganisation to make better use of this valuable asset*
- *That some motorists will be displaced from some locations (e.g. Kingsbridge Ln) – but better matching parking stay durations to appropriate locations will result in a wider benefit for the town centre and those that live and work within it – and those visiting too.*

Parking Strategy Principles

The key elements of the masterplan parking strategy are described by points 1-5 below:

1. Kingsbridge Lane car park

Principle: *Make full use of this central and good quality town centre amenity*

- Focus car park on short-term visitor use
 - Encourage space turnover (target 5+ vehs/day) - amend tariff accordingly regime to discourage stays of more than 2 hours

2. North Street and East Street

Principle: *Continue to provide convenient short-term on-street visitor parking*

- Continue support the existing 30 minute short-stay use
 - Consider provision of further marked-out spaces

3. St Lawrence Lane

Principle: *Improve this important two-way link between the town centre and Chuley Road to the benefit of town centre amenity, movement and Chuley Road access*

- Enable:
 - convenient two-way vehicle movement on St Lawrence Lane
 - Improved vehicle access between the town centre and new car parking within the masterplan site area
 - improvement of St Lawrence Lane public realm
 - Improvement of footway provision for pedestrians
- Relocate on-street parking to Chuley Road site in a dedicated area at the northern end of the site for (in the order of) 10 vehicles – i.e. replacement for existing parking
 - Extend existing double yellow lines to cover non-prohibited parking kerbside

Parking Strategy Principles

Chuley Road

Chuley Road development offers the opportunity to provide complementary public parking for the wider town centre.

The parking survey found little occurrence of indiscriminate parking in the town centre, though most marked spaces were occupied. It is therefore likely that the level of service motorists perceive is not what they would wish, and additional supply would be welcomed (as reported through masterplan consultation discussions). Accordingly, the strategy includes for complementary public parking within the masterplan site, for medium-long term use.

The final capacity of that additional complementary public parking will depend on the final masterplan development land use mix, scale, and resultant parking requirement, but based on our best judgement of:

- Supressed town centre parking need
 - The likely impact on local roads of the associated traffic access movements
 - The associated relocation of present site and town centre supply
- we recommend that it should lie within 50 – 100 spaces which includes those on-street spaces to be provided on the re-planned Chuley Road.

4. Chuley Road – Public Parking - Northern section

Principle: *Provide additional 'convenience' short - medium term town centre parking for town centre use – supporting town centre parking provision and enabling relocation of existing St Lawrence Lane parking (approx. 5-10 vehicles)*

Provide on-street parking capacity within a new shared space street environment for town centre short-medium term parking

5. Chuley Road – Public Parking - Southern section

Principle: *Provide medium-long term parking to the southern end of the site for masterplan site and town centre commercial and public shared use*

- in the order of between 50 - 75 spaces – dependent upon masterplan site use and proven town centre demand
- use to be varied between weekday and weekend use – with commercial use / pricing varied according to emphasis

6. Chuley Road – Commercial / Business Parking – site wide

Principle: *New developments to provide their own dedicated parking provision, with longer term business related parking utilising available on-street or medium-long stay provision.*

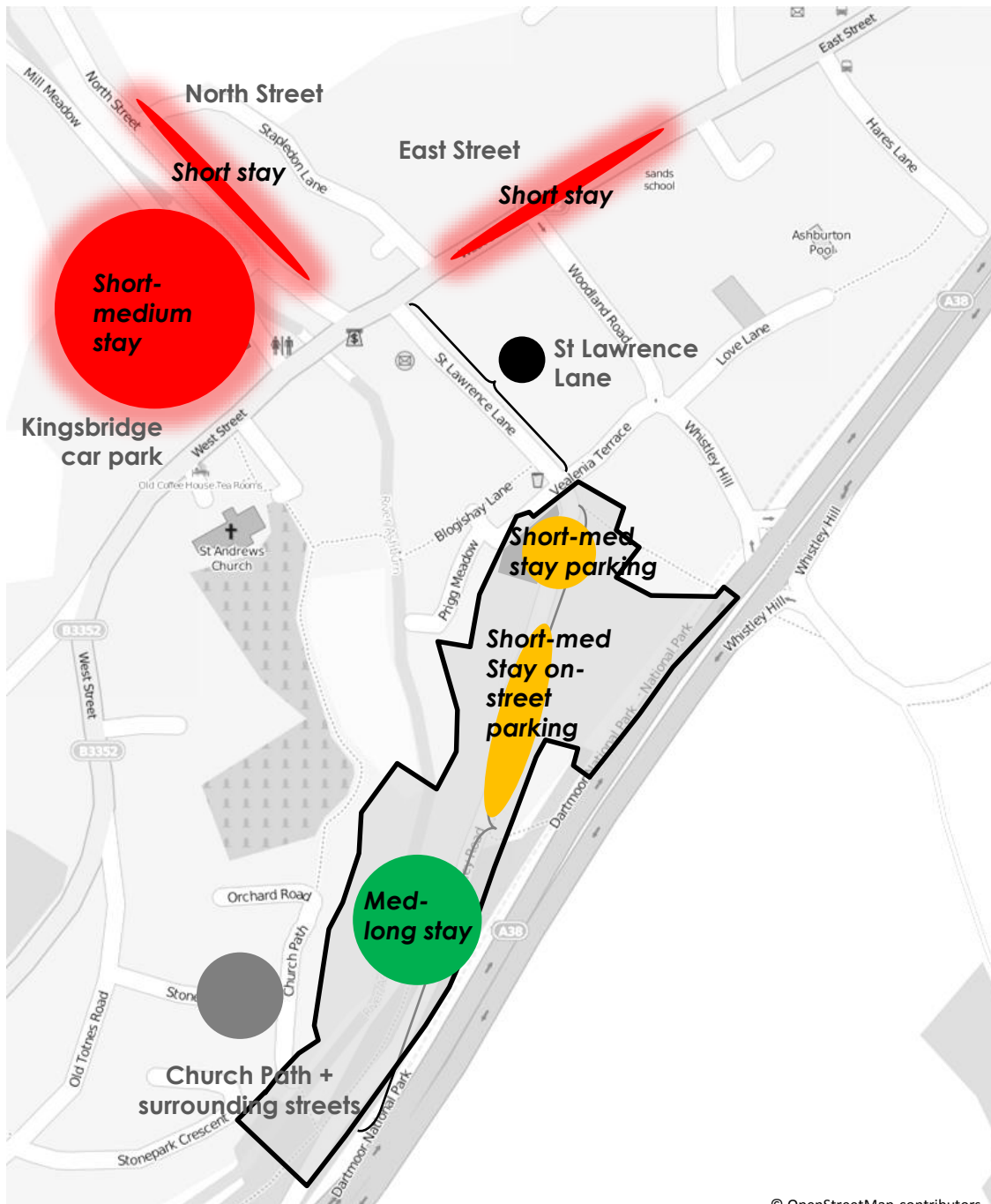
Commercial developments within the masterplan site area should provide and make use of dedicated parking facilities for their business related needs. Other capacity to meet exceptional needs may be found within medium-long stay provision on-street and off-street within the site and town centre.

Parking Strategy Principles and Actions

Headline findings

The diagram (left) indicates a general rearrangement of parking provision across the town centre and within the masterplan site

- Better use made of Kingsbridge Ln car park
- Strengthening of North Street and East St on-street parking provision
- Additional short-medium stay parking in the town centre
- Provision of more convenient on-street provision within the Chuley Rd site
- Provision of short, medium, and long stay parking within the Chuley Rd masterplan site, both on-street and in car parks
- Relocation of St Lawrence Ln parking into the masterplan site area



Intensification of use
– higher turnover / short-stay spaces



Replacement short-medium term parking for Chuley Rd and St Lawrence Ln



New med-long stay parking – provides for displaced Kingsbridge Ln car park longer term need, St Lawrence Ln reprovision, and additional town centre supply

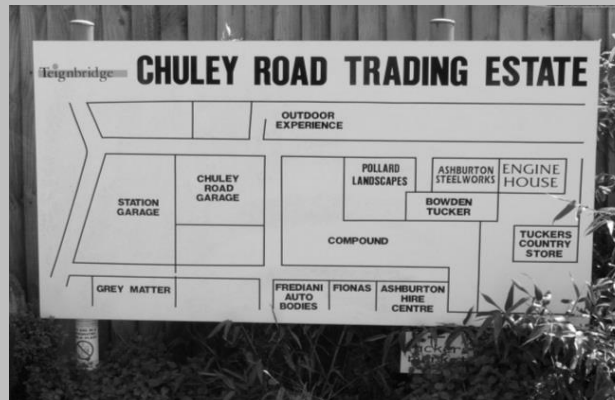


No change



Removal of parking

Traffic Movement Survey Findings



Masterplan Parking Strategy

Traffic Survey – Vehicle Movements

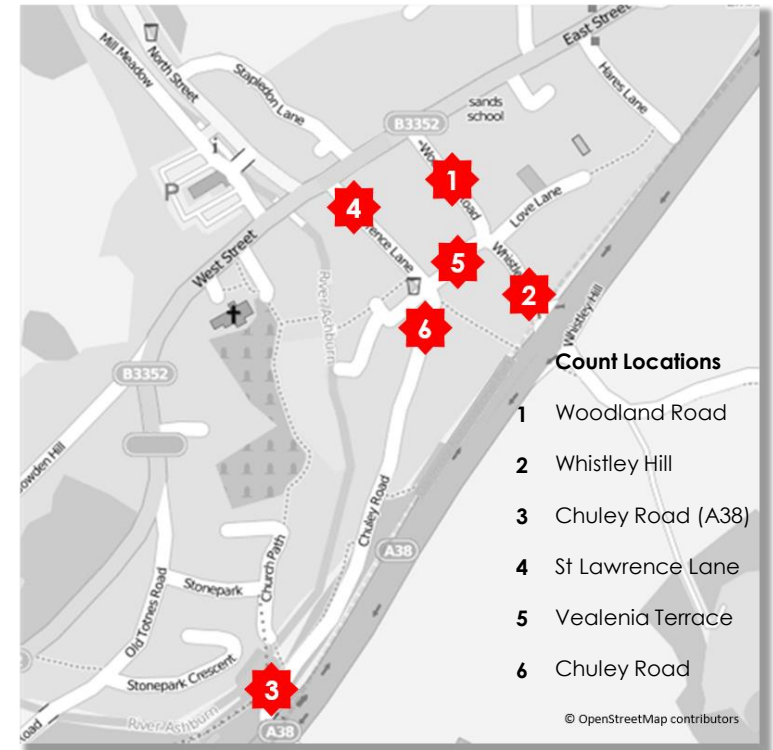
Automatic Traffic Counter (ATC) data analysis

Related to the masterplan parking strategy and the survey work that underpins it, an associated traffic movement survey was undertaken to examine present vehicle flows in the Chuley Road vicinity. Previous to this, masterplan development statements on transport issues and proposals have been based on incomplete 'spot' site observations.

This work presents findings based on the results of an automatic traffic counter (ATC) survey programme undertaken by independent specialist survey sub-contractors between 25th September and 1st October 2013. Having a continuous week-long dataset enables a more reliable assessment to be made of traffic flows and travel patterns in the Chuley Road.

A total of 6 ATCs were used to ensure full coverage of the masterplan area and surrounding streets/roads. Each counter collected data on vehicle flows, vehicle types and vehicle speeds.

Subsequent pages consider observed flow patterns, vehicle type compositions (particularly heavy goods vehicles) and speeds, with key points highlighted for each data collection site.



Findings - Summary

Overall, peak hour vehicle flows are low at typically less than 100 per hour in any direction, i.e. less than two vehicles a minute. Narrow carriageway and footway widths and the tight urban structure of Ashburton tend to accentuate the impact of these otherwise modest flows, leading to a disproportionate impression of moving (and parked) vehicles in the local area.

Goods vehicle flows are generally low in number, notwithstanding the commercial/industrial nature of many of the businesses along Chuley Road. There were very few instances of large goods vehicles accessing the surveyed area.

Chuley Road Southern Link Road

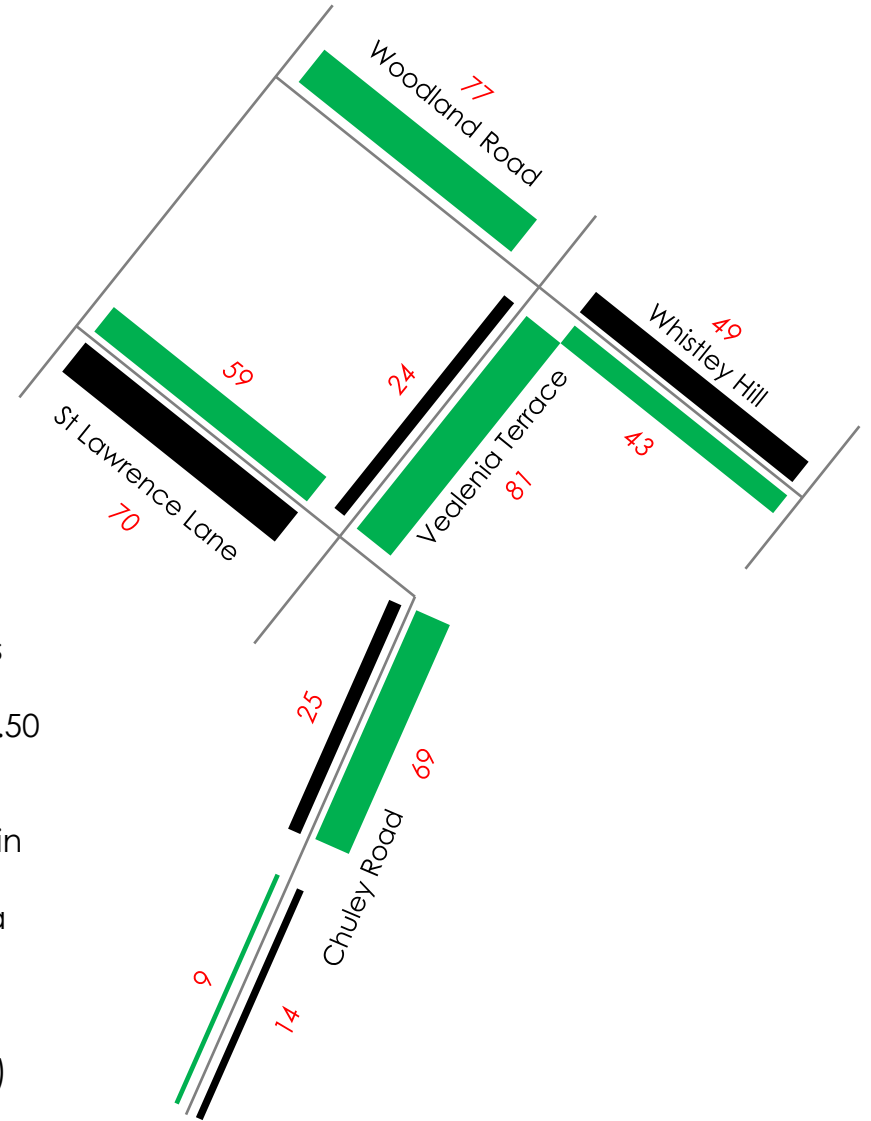
The low hourly traffic flows on the Woodland Rd - Vealenia Terrace – St Lawrence Lane circuit, between 1-2 vehicles per minute during peak hours is evidence of the effect of the narrow carriageways and kerbside sporadic activity on traffic movement. It also strongly suggests at the negative impact that a new and higher capacity road connection to the south of the masterplan site would have in drawing greater traffic flows through that circuit. This is one of the reasons that such a link has been discounted, along with concerns over deliverability, environmental impact, and cost.

8-9am weekday average flow

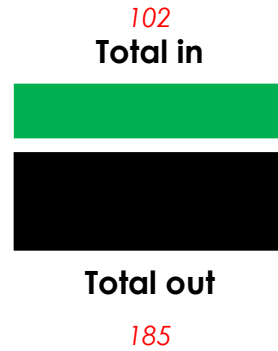


Key points:

- Total flows into / out of the area show a noticeable inbound bias
- The difference in flow between the Chuley Road sites suggests c.50 vehicles are entering the masterplan area and parking (69-14)
- This number of vehicles is approximately equal to the difference in overall in / out flows (189-132) which suggests limited parking activity in nearby streets – backed up by the parking survey data
- Vehicle flows across the surveyed area show that whilst the masterplan area generates trips there are other, larger trip generators such as through trips (between town centre and A38) and school traffic

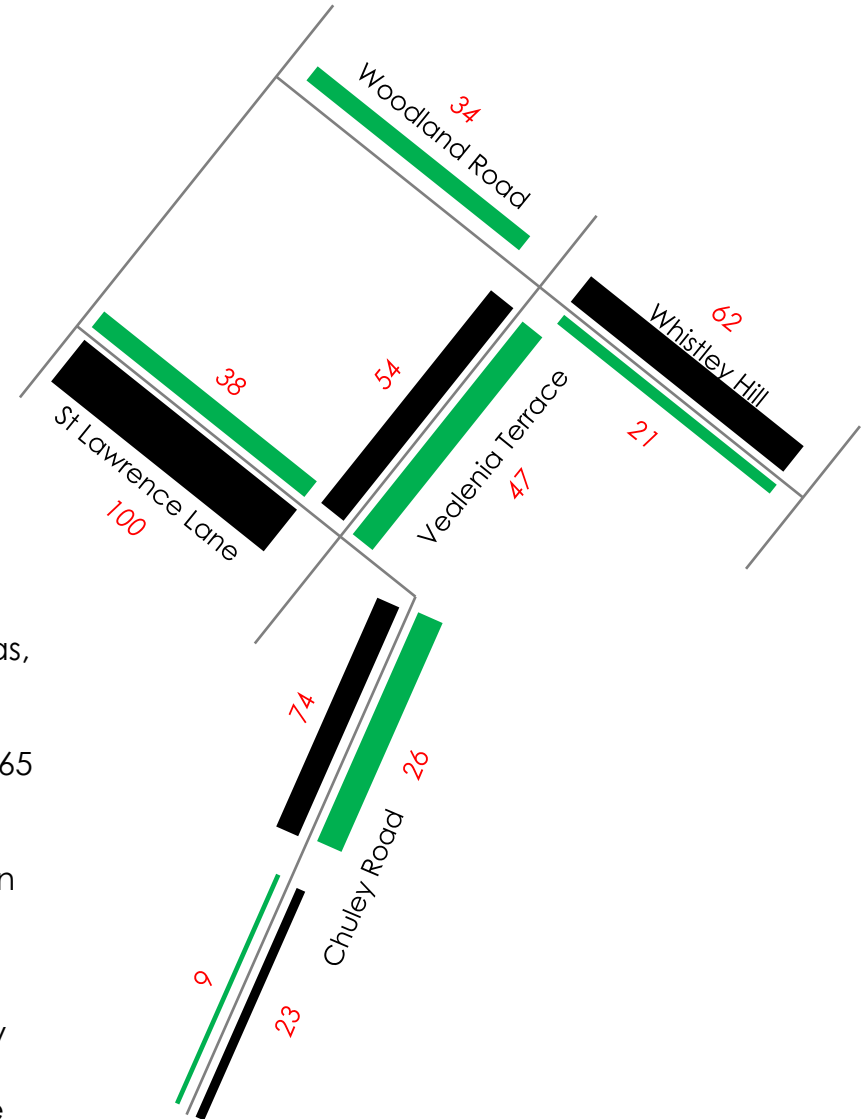


5-6pm weekday average flow

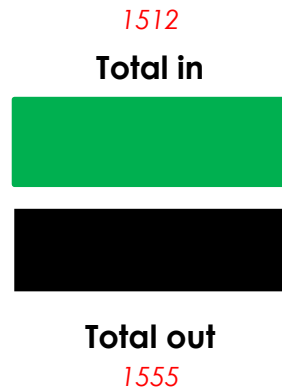


Key points:

- Total flows into / out of the area show a noticeable outbound bias, opposite to the AM peak which is to be expected
- The difference in flow between the Chuley Road sites suggests c.65 vehicles are entering the masterplan area and parking (74-9)
- This number of vehicles is approximately equal to the difference in overall in / out flows (185-102) which suggests limited parking activity in nearby streets – backed up by the parking survey data
- As with the AM peak, vehicle flows across the surveyed area show that whilst the masterplan area generates trips there are other, larger trip generators such as through trips (between town centre and A38)

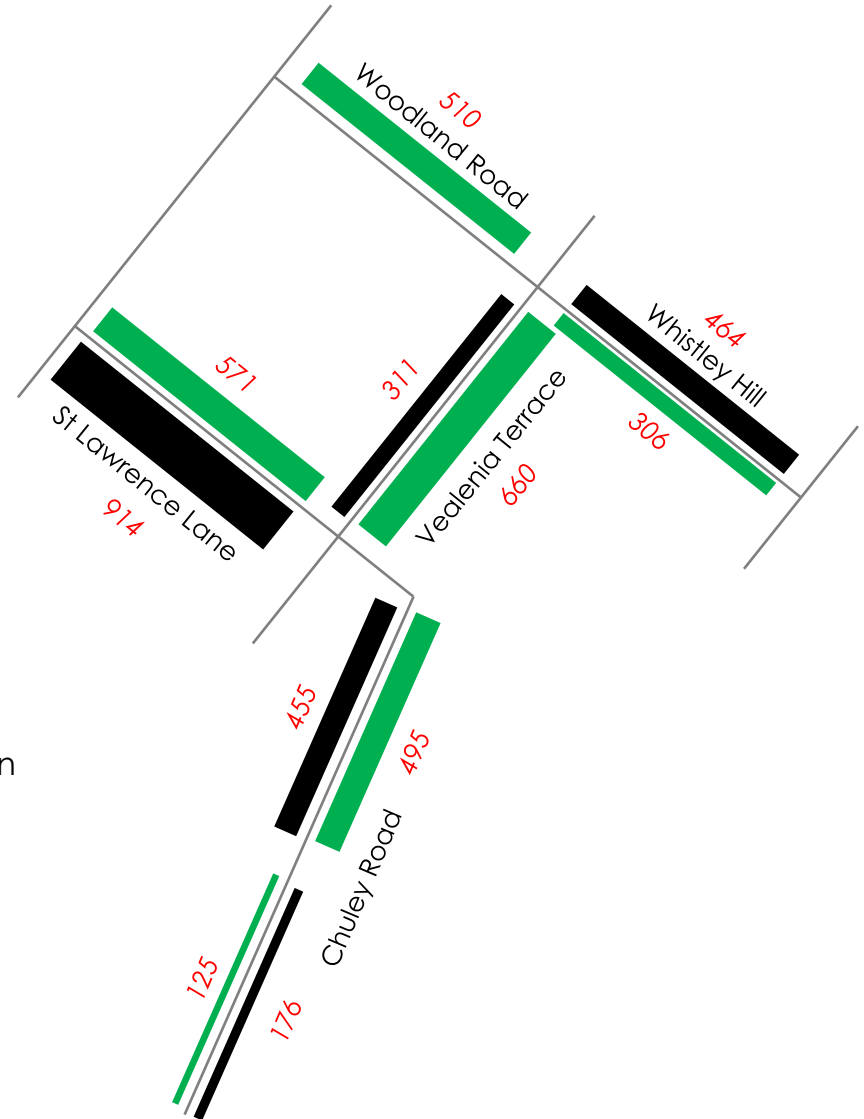


24hr weekday average flow



Key points:

- Balanced flows off East Street from Woodland Road and St Lawrence Lane
- Combination of Woodland Road and Whistley Hill flows lead to an imbalanced daily average along Vealenia Terrace which is predominantly westbound towards Chuley Road
- Balance of flows at junction of Woodland Road and Whistley Hill highlights localised traffic movements associated with the school
- Comparatively low flows on Chuley Road (A38 bridge) confirms predominant northern access preference
- Difference in Chuley Road flows indicates c.350 vehicle trips generated per day by activity in the area

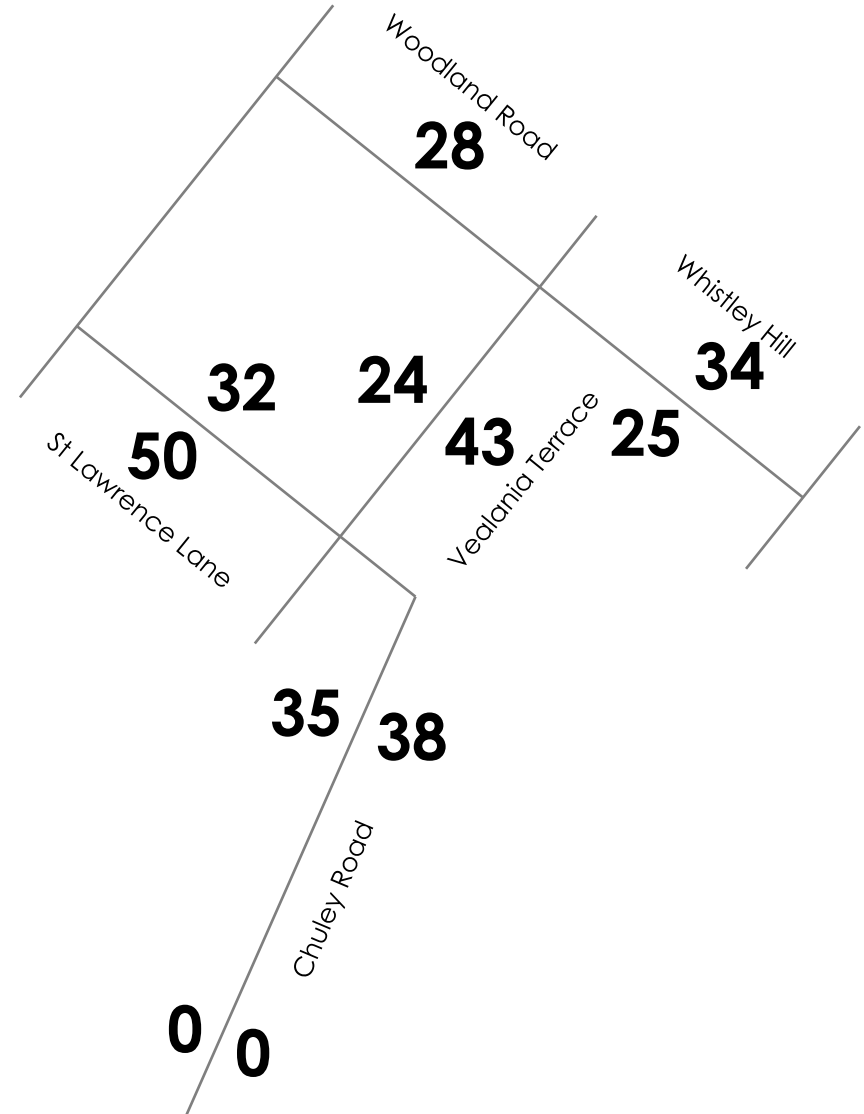


24hr weekday average flow

Light Goods Vehicles & Buses/Coaches (2 axles)

Key points:

- Two axle goods vehicles (or small buses) will typically be Transit vans or similar
- Given the narrow carriageway width and limited connectivity, no goods vehicles were observed going up Chuley Hill
- All other links surveyed identified a modest number of small goods vehicles, equivalent to between 2 and 5 per hour based on a typical 10-hour day (8-6pm)
- Given the variety of commercial / industrial uses along Chuley Road these flows are not unexpected. Deliveries to other businesses and residential properties could well account for a substantial proportion of the flows as well. . It should also be noted that some of these flows could be connected with the Cattlemarket development

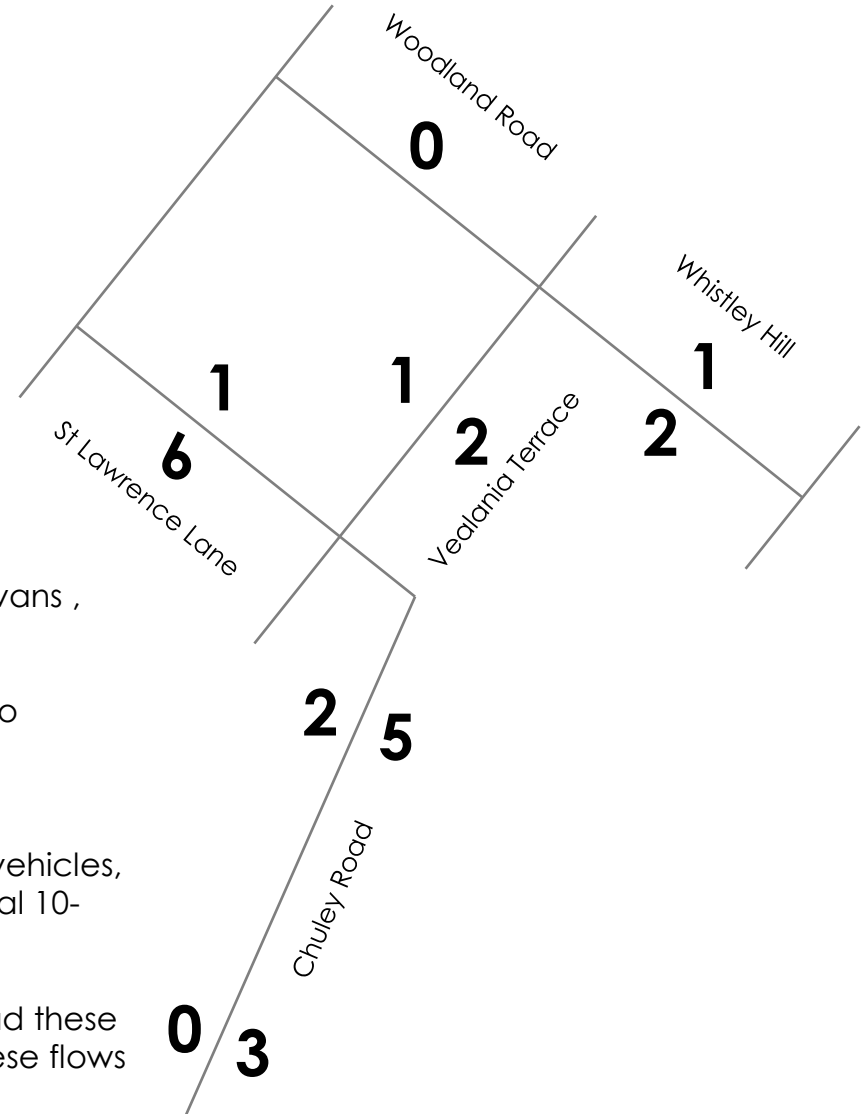


24hr weekday average flow

Ordinary Goods Vehicles and Buses / Coaches (3 axles)

Key points:

- Three axle goods vehicles (or buses) will typically be longer Transit vans , Luton vans or larger rigid body lorries
- Three vehicles are shown going up Chuley Hill which may be due to incorrect classification of the vehicles at the survey location
- Befitting the narrow carriageways and tight urban form all the links surveyed identified a very limited number of medium sized goods vehicles, equivalent to no more than one every two hours based on a typical 10-hour day (8-6pm)
- Given the variety of commercial / industrial uses along Chuley Road these flows are not unexpected. It should also be noted that some of these flows could be connected with the Cattlemarket development
- St Lawrence Lane appears to be the preferred route for these vehicles to leave the area which may lead to isolated instances of highway congestion at particular times

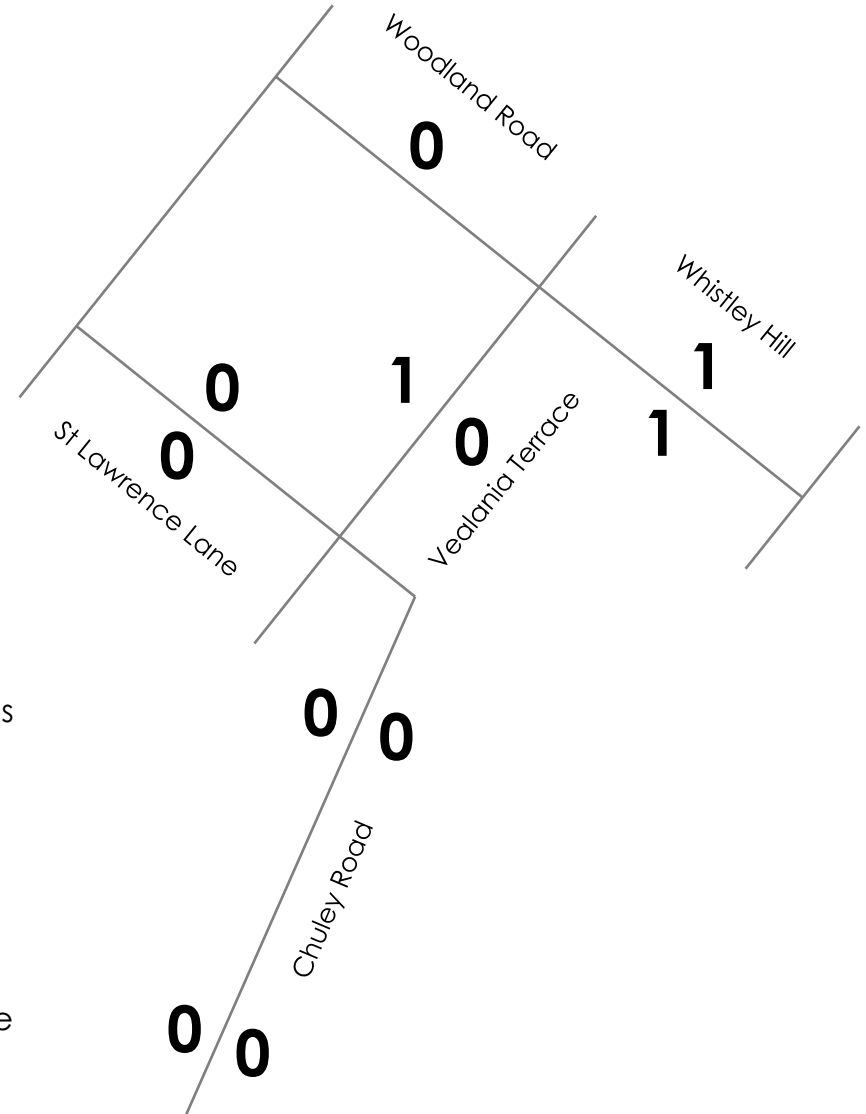


24hr weekday average flow

Ordinary Goods Vehicles (4 axles)

Key points:

- Four axle goods vehicles will typically be large, articulated goods vehicles
- Most of the links surveyed did not observe any large goods vehicles – the only exception being one vehicle entering/exiting the surveyed area on Whistley Hill
- It is unclear from the data where the vehicle went (no data for Vealania Terrace eastbound or other links) but it is reasonable to assume it may be connected with the Cattlemarket development
- Given the narrow widths of Woodland Road and St Lawrence Lane the use of Whistley Hill is the most appropriate access/egress point

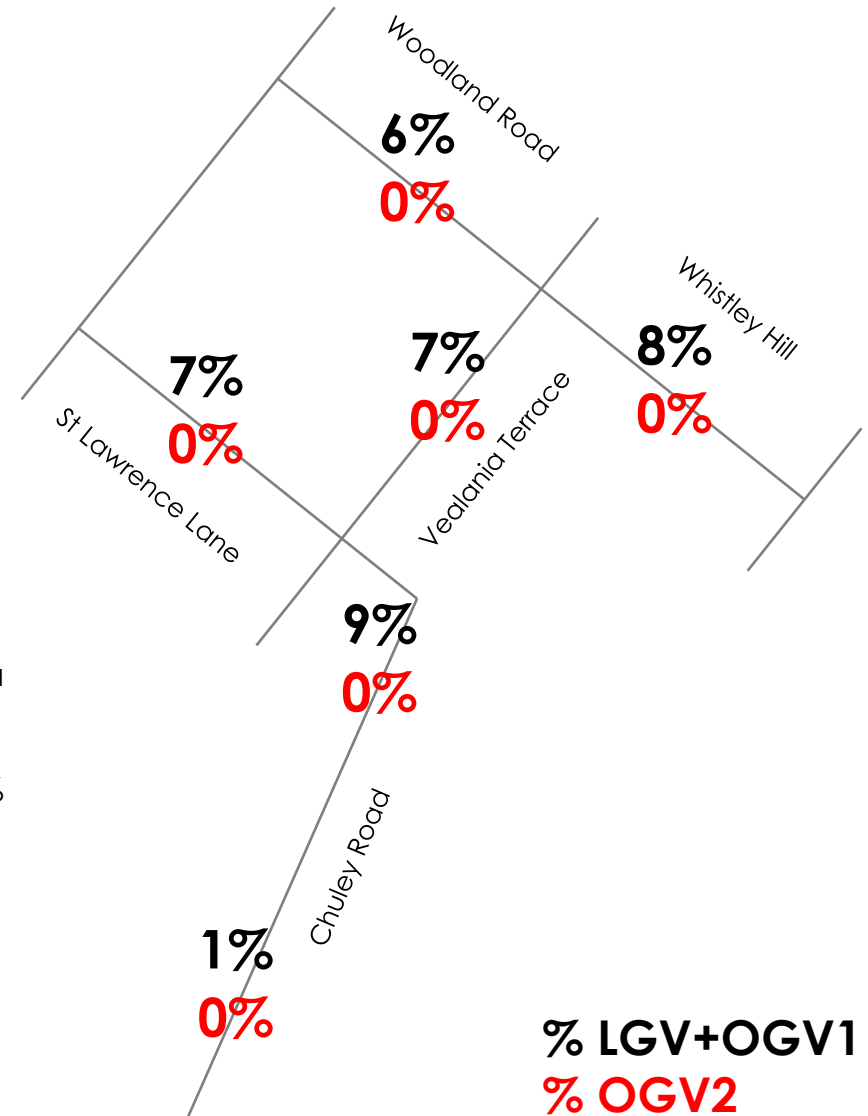


24hr weekday average flow

Goods vehicle percentages

Key points:

- The volume of small/medium goods vehicles represents no more than 9% of all vehicle movements on any individual link and is typically 6-8%. This is consistent with other urban areas that have a mix of residential, commercial and industrial uses in close proximity
- The volume of heavy goods vehicles (OGV2 class) is less than 0.5% of the overall total



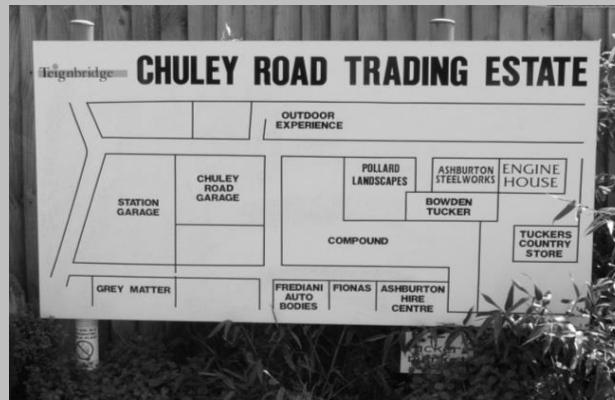
Speed analysis

	Direction	Average speed	85 th percentile speed
Woodland Road	S	17	20
Whistley Hill	N	18	21
	S	19	21
Chuley Road (A38 bridge)	N	11	12
	S	10	10
St Lawrence Lane	N	13	14
	S	12	13
Vealania Terrace	E	16	18
	W	16	18
Chuley Road (by garage)	N	16	18
	S	16	18

Key points:

- Highest speeds were recorded on Whistley Hill which is perhaps to be expected given its edge of urban location and carriageway width
- Conversely some of the lowest speeds recorded were on St Lawrence Lane which is narrow and more congested, being closer to the centre of town
- For all links, the average speed was close to the 85th percentile speed suggesting a tight range of speeds throughout the day, both during and outside of peak periods

APPENDIX



Traffic Survey – Vehicle Survey Data

ATC volume data – Woodland Road southbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location East of Vealenia Ln.
Site No. 3
Road Woodland Rd.
Start Date 25-Sep-13
Direction Southbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

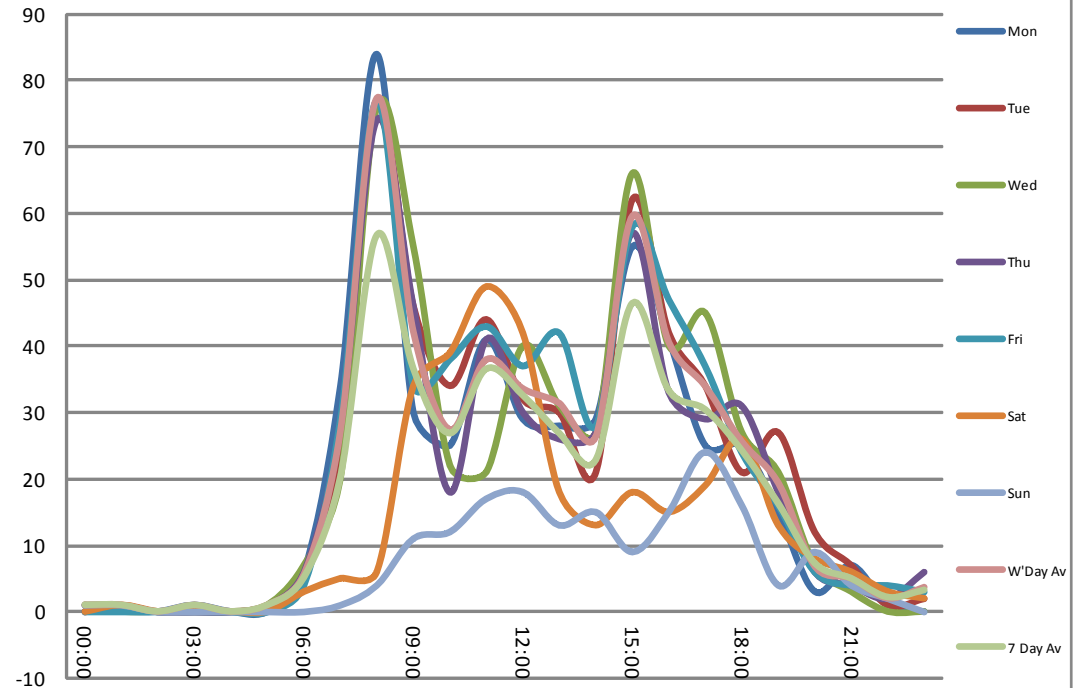
Average Weekday 510
7 Day Average 437

3. Woodland Rd. - East of Vealenia Ln.

Southbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	84	76	76	74	77	49	17		
PM Peak	55	62	66	57	58	42	24		
00:00	0	0	1	1	0	0	1	1	1
01:00	0	1	0	1	0	1	1	1	1
02:00	0	0	0	0	0	0	0	0	0
03:00	1	0	0	0	0	0	0	1	1
04:00	0	0	0	0	0	0	0	0	0
05:00	0	1	1	1	0	0	0	1	1
06:00	6	5	7	6	4	3	0	6	5
07:00	34	25	20	28	29	5	1	27	20
08:00	84	76	76	74	77	6	4	77	57
09:00	30	46	55	46	34	34	11	42	37
10:00	25	34	22	18	38	39	12	27	27
11:00	41	44	21	41	43	49	17	38	37
12:00	29	32	40	30	37	42	18	34	33
13:00	28	30	31	26	42	18	13	31	27
14:00	29	21	27	27	28	13	15	26	23
15:00	55	62	66	57	58	18	9	60	46
16:00	41	42	40	33	47	15	15	41	33
17:00	25	34	45	29	37	19	24	34	30
18:00	25	21	27	31	24	26	16	26	24
19:00	15	27	21	18	16	13	4	19	16
20:00	3	12	7	6	6	8	9	7	7
21:00	7	7	3	4	4	6	4	5	5
22:00	1	1	0	2	4	3	2	2	2
23:00	0	2	0	6	3	2	0	4	3
Total	479	523	510	485	531	320	176	510	437

Hourly Volume Graph
3. Woodland Rd. - East of Vealenia Ln.



ATC volume data – Whistley Hill northbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location South of Woodland Rd.
Site No. 2
Road Whistley Hill
Start Date 25-Sep-13
Direction Northbound

15 Minute Interval Volume
30 Minute Interval Volume

Menu

Volume Summary

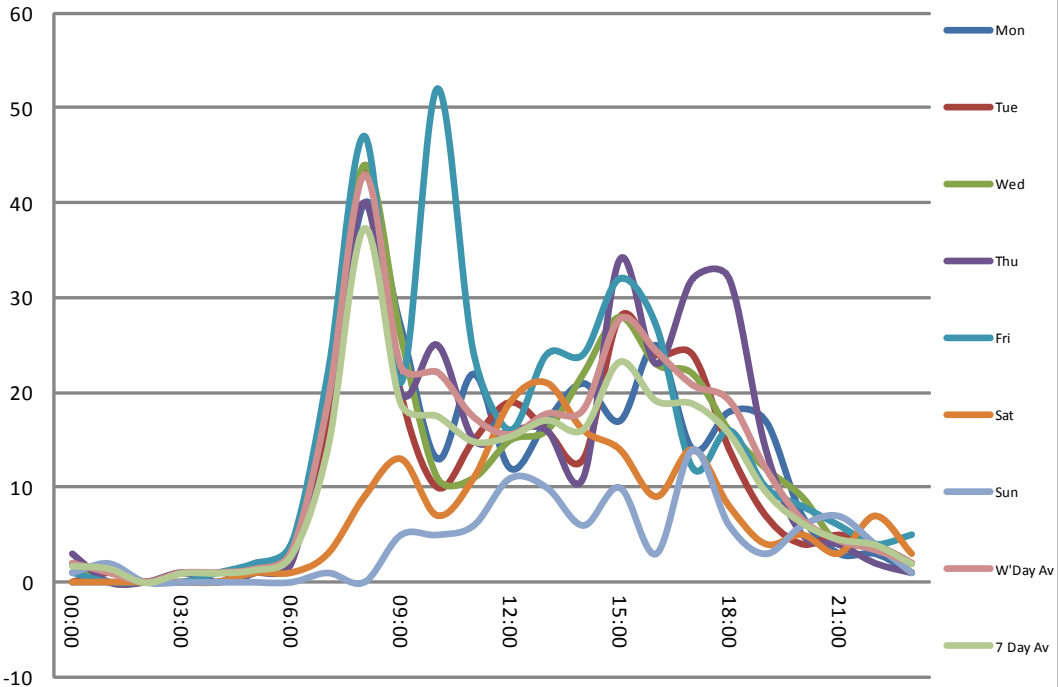
Average Weekday 306
7 Day Average 264

2. Whistley Hill - South of Woodland Rd.

Northbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	40	44	44	40	52	13	6		
PM Peak	25	28	28	34	32	21	14		
00:00	0	0	2	3	1	0	1	2	2
01:00	0	1	0	0	0	0	2	1	2
02:00	0	0	0	0	0	0	0	0	0
03:00	0	1	0	1	0	0	0	1	1
04:00	0	0	0	0	1	0	0	1	1
05:00	1	2	1	1	2	1	0	1	1
06:00	4	3	3	2	4	1	0	3	3
07:00	17	16	21	19	22	3	1	19	14
08:00	40	44	44	40	47	9	0	43	37
09:00	27	20	26	20	21	13	5	23	19
10:00	13	10	11	25	52	7	5	22	18
11:00	22	15	11	15	24	11	6	17	15
12:00	12	19	15	16	16	19	11	16	15
13:00	17	16	16	16	24	21	10	18	17
14:00	21	13	22	11	24	16	6	18	16
15:00	17	28	28	34	32	14	10	28	23
16:00	25	24	23	23	27	9	3	24	19
17:00	14	24	22	32	12	14	14	21	19
18:00	18	14	16	32	16	8	6	19	16
19:00	17	7	12	14	10	4	3	12	10
20:00	7	4	9	5	8	5	6	7	6
21:00	3	5	4	4	6	3	7	4	5
22:00	3	4	4	2	4	7	4	3	4
23:00	1	2	1	1	5	3	1	2	2
Total	279	272	291	316	358	168	101	306	264

Hourly Volume Graph
2. Whistley Hill - South of Woodland Rd.



ATC volume data – Whistley Hill southbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location South of Woodland Rd.
Site No. 2
Road Whistley Hill
Start Date 25-Sep-13
Direction Southbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

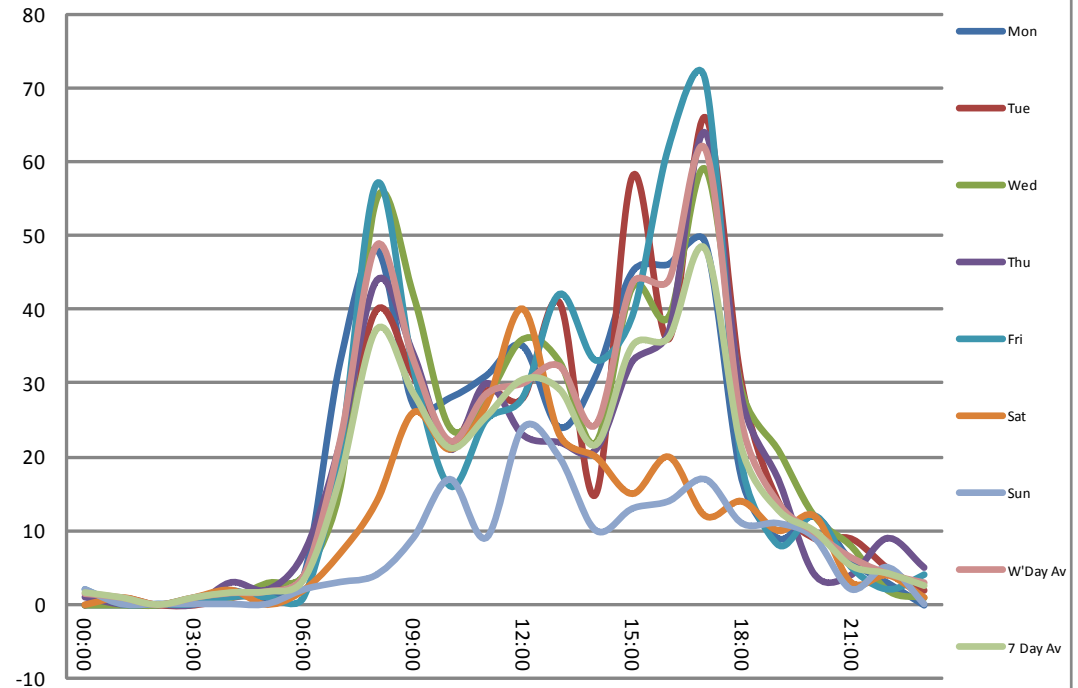
Average Weekday 464
7 Day Average 398

2. Whistley Hill - South of Woodland Rd.

Southbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	48	40	55	44	57	27	17		
PM Peak	49	66	59	64	71	40	24		
00:00	0	0	0	1	2	0	2	2	2
01:00	0	1	0	0	0	1	0	1	1
02:00	0	0	0	0	0	0	0	0	0
03:00	1	0	1	0	0	1	0	1	1
04:00	2	1	1	3	1	2	0	2	2
05:00	1	2	3	2	1	0	0	2	2
06:00	4	4	4	7	1	2	2	4	3
07:00	33	20	16	22	21	7	3	22	17
08:00	48	40	55	44	57	14	4	49	37
09:00	27	31	42	34	32	26	9	33	29
10:00	28	22	24	21	16	21	17	22	21
11:00	31	29	28	30	25	27	9	29	26
12:00	35	28	36	23	28	40	24	30	31
13:00	24	41	33	22	42	23	20	32	29
14:00	31	15	22	21	33	20	10	24	22
15:00	45	58	43	33	39	15	13	44	35
16:00	46	36	39	37	62	20	14	44	36
17:00	49	66	59	64	71	12	17	62	48
18:00	17	30	29	28	19	14	11	25	21
19:00	9	14	21	17	8	10	11	14	13
20:00	12	9	12	4	12	12	9	10	10
21:00	6	9	8	4	5	3	2	6	5
22:00	3	5	2	9	2	4	5	4	4
23:00	0	2	1	5	4	1	0	3	3
Total	452	463	479	431	481	275	182	464	398

Hourly Volume Graph
2. Whistley Hill - South of Woodland Rd.



ATC volume data – Chuley Road (A38 bridge) northbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location North of A38.
Site No. 1
Road Churley Rd.
Start Date 25-Sep-13
Direction Northbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

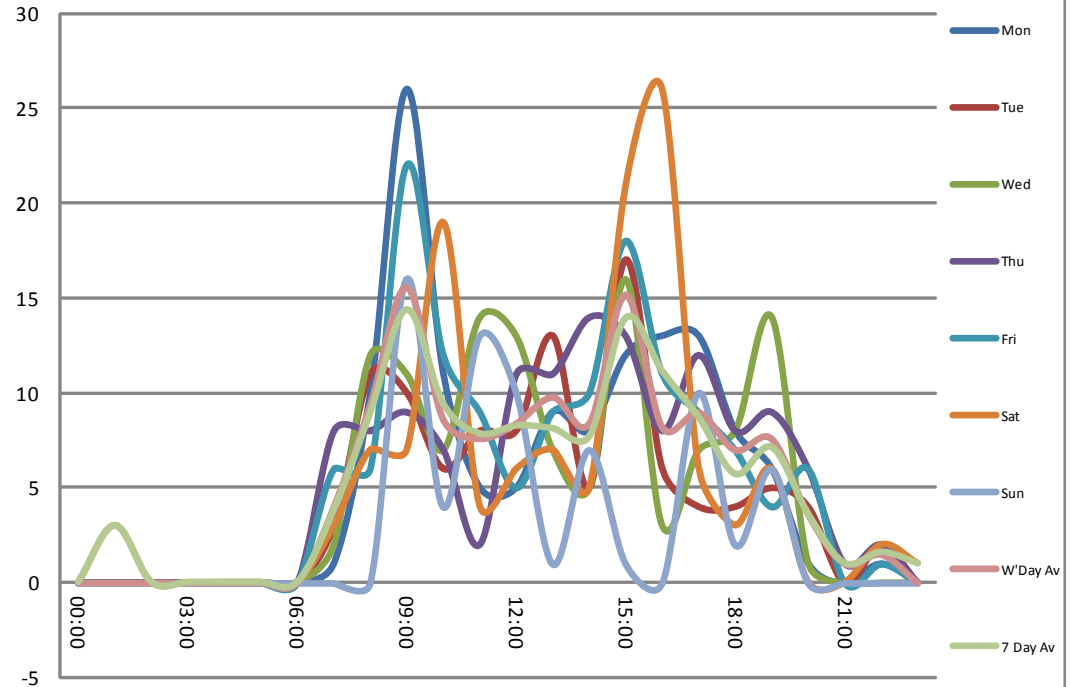
Average Weekday 125
7 Day Average 126

1. Churley Rd. - North of A38.


Northbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	26	11	14	9	22	19	16		
PM Peak	13	17	16	14	18	26	10		
00:00	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	3	0	0	3
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0
07:00	1	3	2	8	6	3	0	4	4
08:00	10	11	12	8	6	7	0	9	9
09:00	26	10	11	9	22	7	16	16	14
10:00	11	6	7	7	12	19	4	9	9
11:00	5	8	14	2	9	4	13	8	8
12:00	5	8	13	11	5	6	10	8	8
13:00	9	13	7	11	9	7	1	10	8
14:00	8	5	5	14	10	5	7	8	8
15:00	12	17	16	13	18	21	1	15	14
16:00	13	6	3	8	11	26	0	8	11
17:00	13	4	7	12	9	6	10	9	9
18:00	8	4	8	8	7	3	2	7	6
19:00	6	5	14	9	4	6	6	8	7
20:00	1	4	1	6	6	0	0	4	4
21:00	0	0	0	1	0	0	0	1	1
22:00	1	2	0	2	1	2	0	2	2
23:00	0	0	0	0	0	1	0	0	1
Total	129	106	120	129	135	126	70	125	126

Hourly Volume Graph
1. Churley Rd. - North of A38.



ATC volume data – Chuley Road (A38 bridge) southbound



Job Number
Client
Project
Location
Site No.
Road
Start Date
Direction

C0377
Urban-Flow
Ashburton Parking Beats - ATC
North of A38.
1
Churley Rd.
25-Sep-13
Southbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

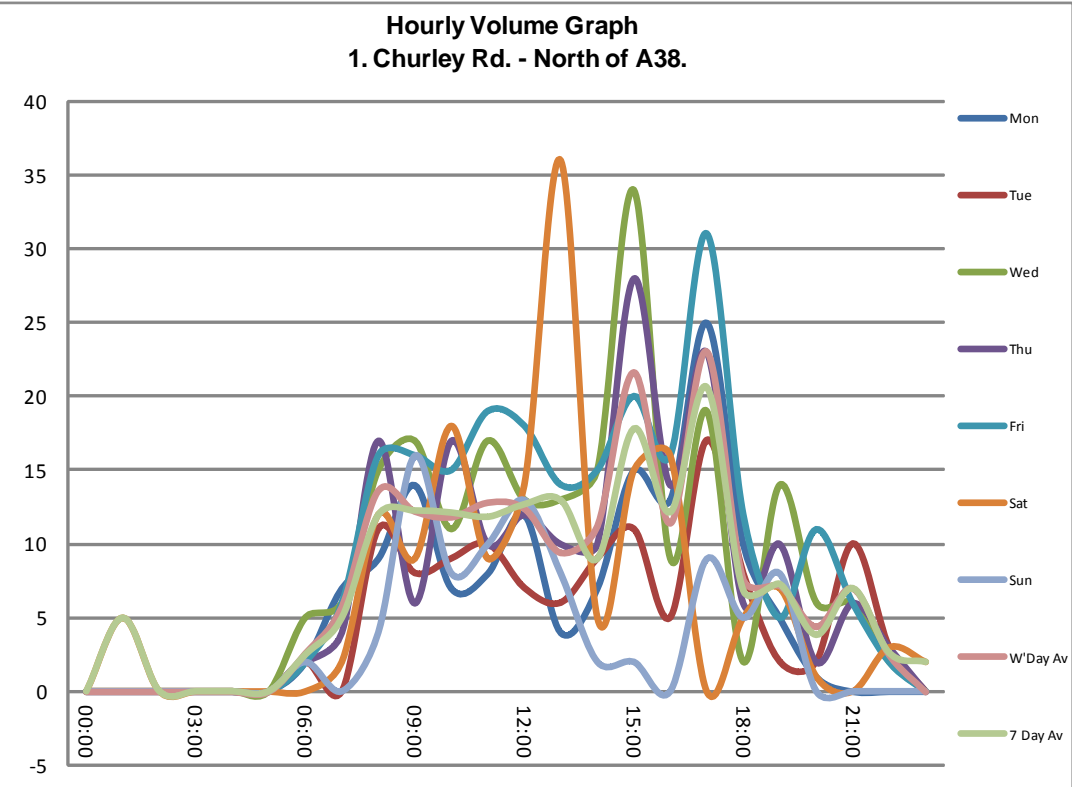
Volume Summary

Average Weekday 176
7 Day Average 176

1. Churley Rd. - North of A38.

▼ Southbound ▼

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	14	11	17	17	19	18	16		
PM Peak	25	17	34	28	31	36	13		
00:00	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	5	0	0	5
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0
06:00	2	2	5	2	2	0	2	3	3
07:00	7	0	6	4	6	2	0	6	5
08:00	9	11	15	17	16	12	4	14	12
09:00	14	8	17	6	16	9	16	12	12
10:00	7	9	11	17	15	18	8	12	12
11:00	8	10	17	10	19	9	10	13	12
12:00	12	7	13	12	18	14	13	12	13
13:00	4	6	13	10	14	36	8	9	13
14:00	7	9	15	10	15	5	2	11	9
15:00	15	11	34	28	20	15	2	22	18
16:00	13	5	9	14	16	16	0	11	12
17:00	25	17	19	23	31	0	9	23	21
18:00	10	8	2	6	12	5	5	8	7
19:00	5	2	14	10	5	7	8	7	7
20:00	1	2	6	2	11	1	0	4	4
21:00	0	10	6	6	6	0	0	7	7
22:00	0	3	2	3	2	3	0	3	3
23:00	0	0	0	0	0	2	0	0	2
Total	139	120	204	180	224	159	87	176	176



ATC volume data – St Lawrence Lane northbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location North of Churley Rd.
Site No. 4
Road St. Lawrence Ln.
Start Date 25-Sep-13
Direction Northbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

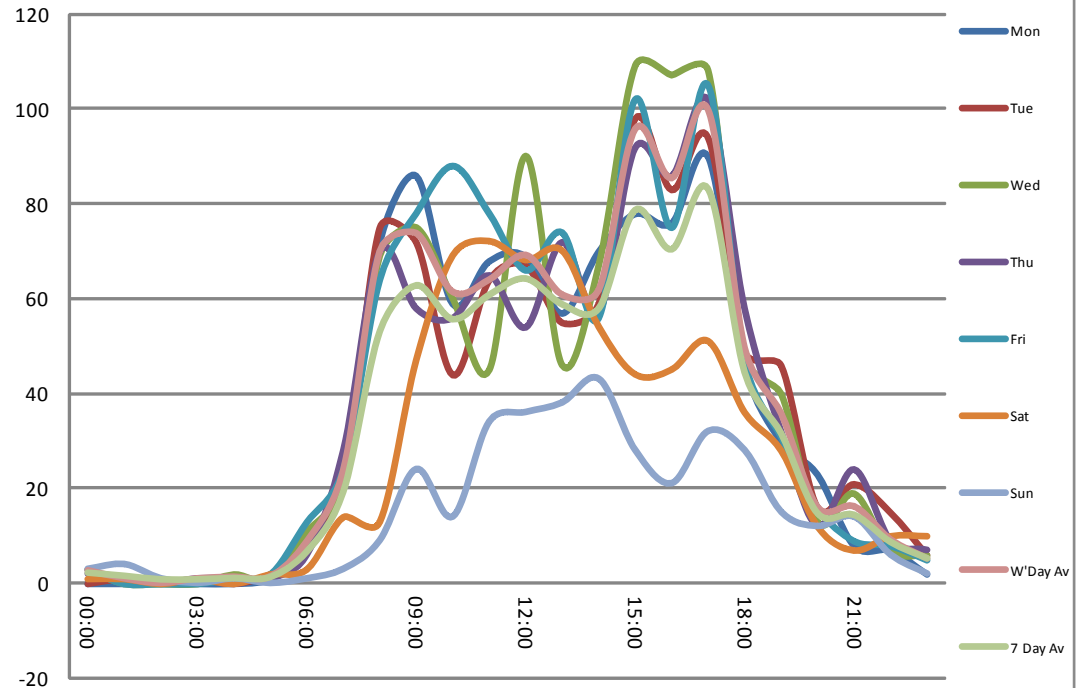
Average Weekday 914
7 Day Average 801

4. St. Lawrence Ln. - North of Churley Rd.

Northbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	86	75	75	70	88	72	34		
PM Peak	90	98	109	102	105	70	43		
00:00	0	0	3	2	3	1	3	3	2
01:00	0	1	0	1	0	1	4	1	2
02:00	0	0	0	0	0	0	1	0	1
03:00	0	1	0	1	0	1	0	1	1
04:00	0	0	2	1	1	0	1	1	1
05:00	1	2	1	1	2	2	0	1	2
06:00	7	7	11	6	13	3	1	9	7
07:00	25	21	21	28	24	14	3	24	19
08:00	72	75	69	70	64	13	9	70	53
09:00	86	72	75	58	78	47	24	74	63
10:00	59	44	60	56	88	69	14	61	56
11:00	68	64	45	65	78	72	34	64	61
12:00	69	67	90	54	66	68	36	69	64
13:00	57	55	46	72	74	70	38	61	59
14:00	70	59	67	57	56	54	43	62	58
15:00	78	98	109	92	102	44	28	96	79
16:00	76	83	107	86	75	45	21	85	70
17:00	90	94	108	102	105	51	32	100	83
18:00	46	49	48	58	47	36	28	50	45
19:00	30	46	40	32	31	28	15	36	32
20:00	23	16	13	12	16	12	12	16	15
21:00	8	21	19	24	9	7	14	16	15
22:00	7	15	7	9	8	10	6	9	9
23:00	2	6	6	7	5	10	2	5	5
Total	874	896	947	894	945	658	369	914	801

Hourly Volume Graph
4. St. Lawrence Ln. - North of Churley Rd.



ATC volume data – St Lawrence Lane southbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location North of Churley Rd.
Site No. 4
Road St. Lawrence Ln.
Start Date 25-Sep-13
Direction Southbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

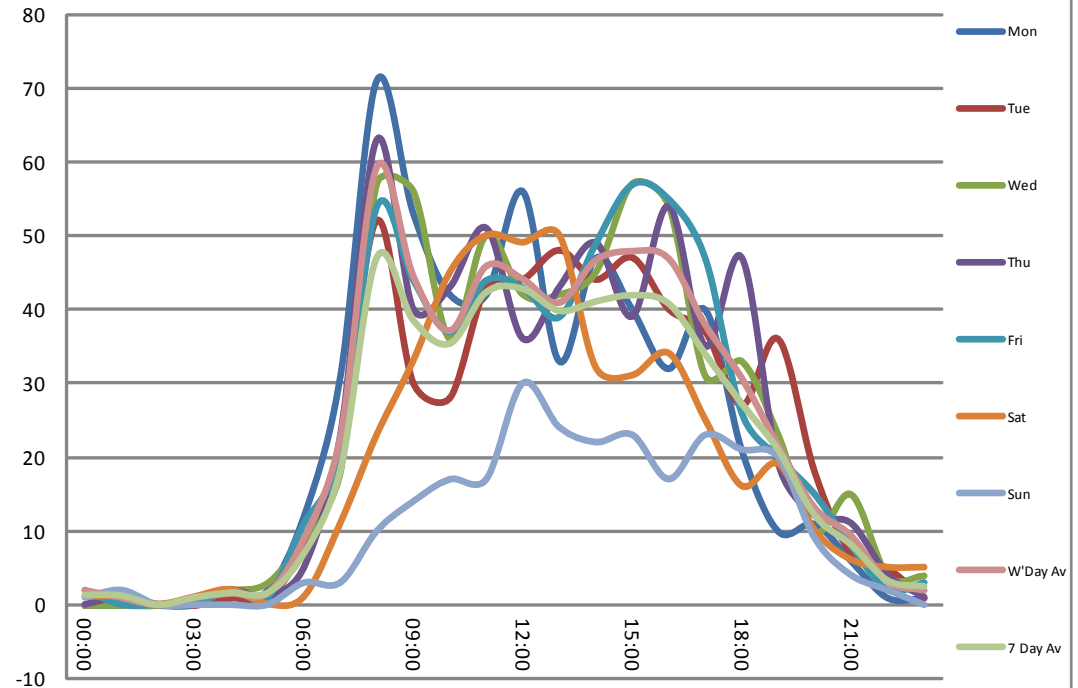
Average Weekday 571
7 Day Average 511

4. St. Lawrence Ln. - North of Churley Rd.

Southbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	71	52	57	63	54	50	17		
PM Peak	56	48	57	54	57	50	30		
00:00	0	0	0	0	2	1	1	2	1
01:00	0	1	0	1	0	1	2	1	1
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	1	0	1	1
04:00	1	1	2	2	2	2	0	2	2
05:00	2	1	3	1	1	0	0	2	2
06:00	12	8	9	5	11	1	3	9	7
07:00	31	22	18	23	20	11	3	23	18
08:00	71	52	57	63	54	23	10	59	47
09:00	53	30	56	40	44	33	14	45	39
10:00	42	28	36	43	37	45	17	37	35
11:00	42	43	50	51	44	50	17	46	42
12:00	56	44	42	36	43	49	30	44	43
13:00	33	48	42	43	39	50	24	41	40
14:00	47	44	45	49	49	32	22	47	41
15:00	40	47	57	39	57	31	23	48	42
16:00	32	40	54	54	55	34	17	47	41
17:00	40	37	31	35	47	25	23	38	34
18:00	21	27	33	47	26	16	21	31	27
19:00	10	36	23	19	20	19	20	22	21
20:00	11	18	10	12	15	10	9	13	12
21:00	6	7	15	11	8	6	4	9	8
22:00	1	5	4	4	2	5	2	3	3
23:00	1	1	4	1	3	5	0	2	3
Total	552	540	592	579	579	450	262	571	511

Hourly Volume Graph
4. St. Lawrence Ln. - North of Churley Rd.



ATC volume data – Vealenia Terrace eastbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location West of Woodland Rd.
Site No. 5
Road Vealenia Ln.
Start Date 25-Sep-13
Direction Eastbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

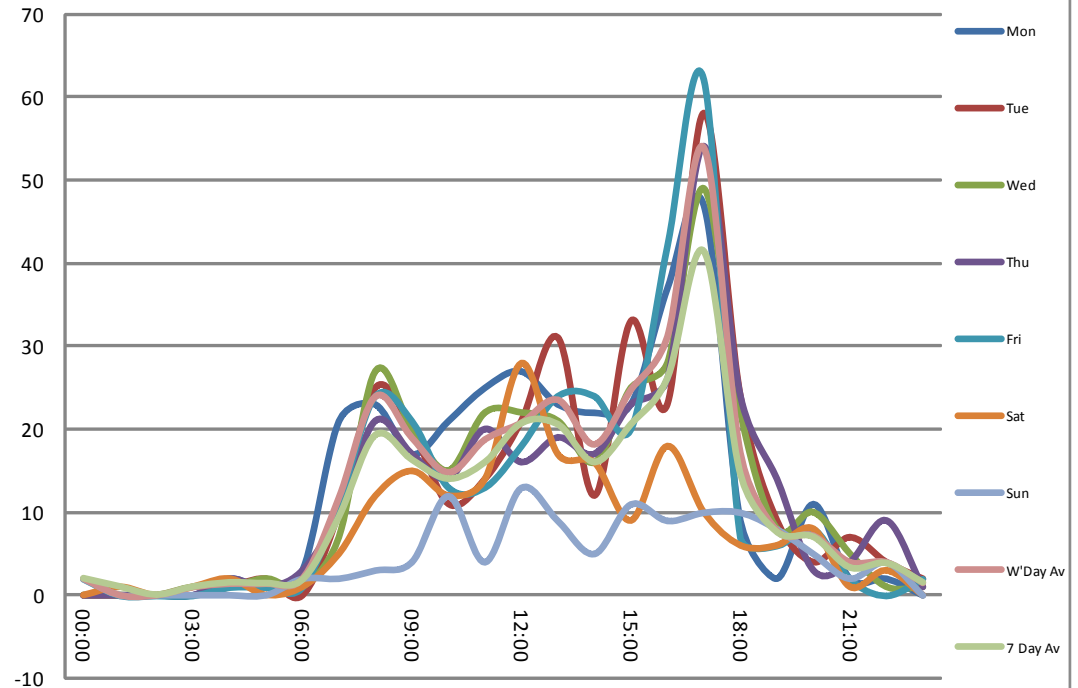
Average Weekday 311
7 Day Average 267

5. Vealenia Ln. - West of Woodland Rd.

Eastbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	25	25	27	21	24	15	12		
PM Peak	47	58	49	54	62	28	13		
00:00	0	0	0	0	2	0	2	2	2
01:00	0	0	0	0	0	1	0	0	1
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	1	0	1	1
04:00	2	1	1	2	1	2	0	1	2
05:00	1	2	2	1	1	0	0	1	1
06:00	3	0	1	3	1	1	2	2	2
07:00	21	10	7	10	11	5	2	12	9
08:00	23	25	27	21	24	12	3	24	19
09:00	17	20	20	17	21	15	4	19	16
10:00	21	11	15	14	13	12	12	15	14
11:00	25	14	22	20	13	14	4	19	16
12:00	27	21	22	16	18	28	13	21	21
13:00	23	31	21	19	24	17	9	24	21
14:00	22	12	16	17	24	16	5	18	16
15:00	23	33	25	23	20	9	11	25	21
16:00	37	23	28	26	42	18	9	31	26
17:00	47	58	49	54	62	10	10	54	41
18:00	9	24	22	24	7	6	10	17	15
19:00	2	9	8	14	6	6	8	8	8
20:00	11	4	10	3	8	8	5	7	7
21:00	2	7	5	4	2	1	2	4	3
22:00	2	4	1	9	0	3	4	4	4
23:00	0	2	1	1	2	0	0	2	2
Total	318	311	304	298	302	185	115	311	267

Hourly Volume Graph
5. Vealenia Ln. - West of Woodland Rd.



ATC volume data – Vealenia Terrace westbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location West of Woodland Rd.
Site No. 5
Road Vealenia Ln.
Start Date 25-Sep-13
Direction Westbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

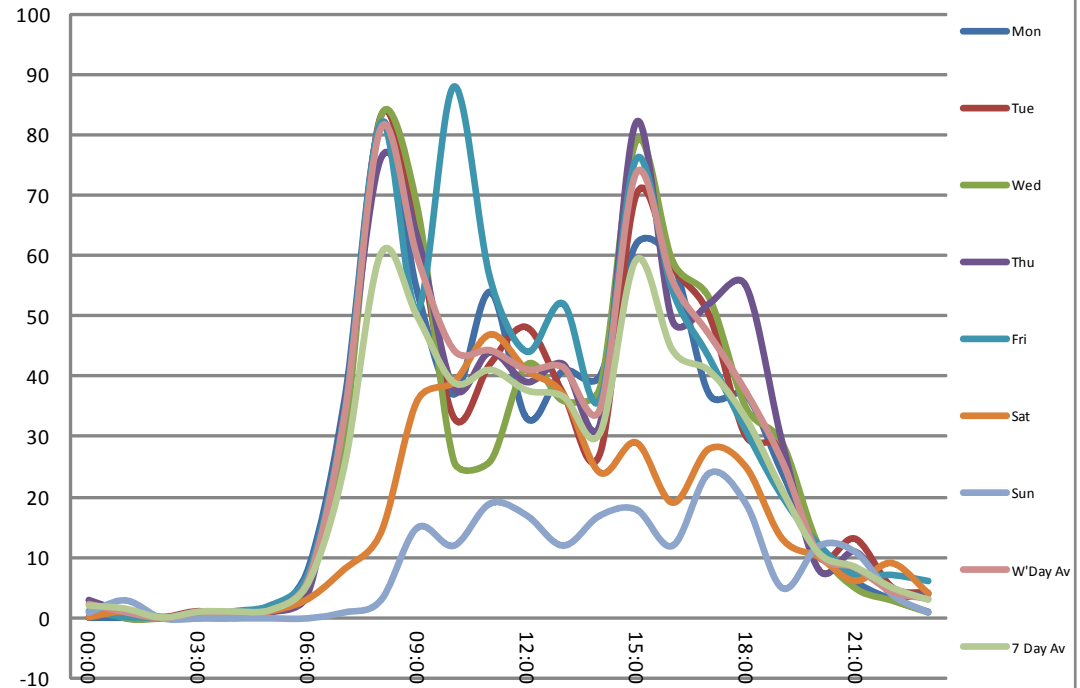
Average Weekday 660
7 Day Average 559

5. Vealenia Ln. - West of Woodland Rd.

Westbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	82	83	83	76	88	47	19		
PM Peak	62	70	79	82	76	41	24		
00:00	0	0	3	3	1	0	1	2	2
01:00	0	1	0	1	0	1	3	1	2
02:00	0	0	0	0	0	0	0	0	0
03:00	0	1	0	1	0	0	0	1	1
04:00	0	0	1	0	1	0	0	1	1
05:00	1	2	1	1	2	1	0	1	1
06:00	8	5	7	4	7	3	0	6	6
07:00	36	32	30	35	34	8	1	33	25
08:00	82	83	83	76	82	14	3	81	60
09:00	54	63	68	63	51	36	15	60	50
10:00	37	33	26	38	88	39	12	44	39
11:00	54	42	26	44	56	47	19	44	41
12:00	33	48	42	39	44	41	17	41	38
13:00	41	37	36	42	52	37	12	42	37
14:00	40	27	38	32	36	24	17	35	31
15:00	62	70	79	82	76	29	18	74	59
16:00	59	58	59	49	54	19	12	56	44
17:00	37	50	53	52	43	28	24	47	41
18:00	37	30	35	55	31	25	19	38	33
19:00	24	28	29	29	20	13	5	26	21
20:00	11	10	12	8	12	10	12	11	11
21:00	6	13	5	11	7	6	11	8	8
22:00	3	5	3	4	7	9	4	4	5
23:00	1	4	1	4	6	4	1	3	3
Total	626	642	637	673	710	394	206	660	559

Hourly Volume Graph
5. Vealenia Ln. - West of Woodland Rd.



ATC volume data – Chuley Road (garage) northbound



Job Number	C0377
Client	Urban-Flow
Project	Ashburton Parking Beats - ATC
Location	South of Meadow Prigg.
Site No.	6
Road	Churley Rd.
Start Date	25-Sep-13
Direction	Northbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

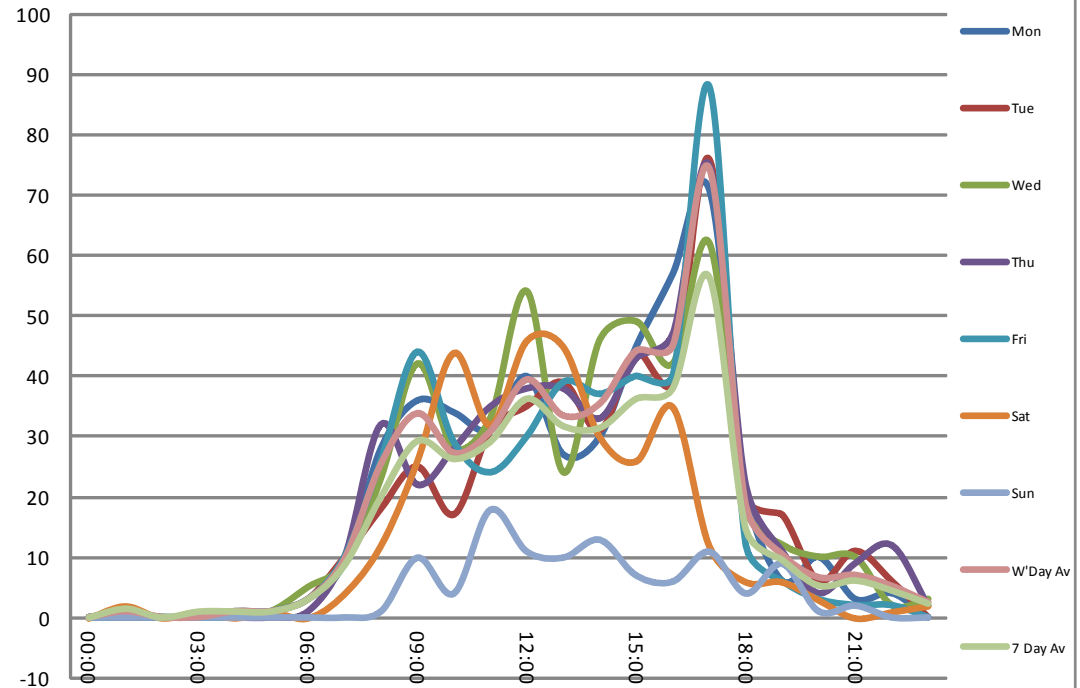
Average Weekday	455
7 Day Average	394

6. Churley Rd. - South of Meadow Prigg.

Northbound

	Day of Week							Ave W'day	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
Time	30-Sep	01-Oct	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep		
AM Peak	36	31	42	35	44	44	18		
PM Peak	71	76	62	75	88	46	13		
00:00	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	2	0	1	2
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	1
04:00	1	0	0	0	0	0	0	1	1
05:00	1	1	1	0	1	1	0	1	1
06:00	3	3	5	1	3	0	0	3	3
07:00	9	10	9	10	10	4	0	10	9
08:00	28	18	23	32	26	12	1	25	20
09:00	36	25	42	22	44	26	10	34	29
10:00	34	17	28	28	29	44	4	27	26
11:00	31	31	33	35	24	32	18	31	29
12:00	40	35	54	38	30	46	11	39	36
13:00	27	39	24	38	39	45	10	33	32
14:00	30	31	46	33	37	30	13	35	31
15:00	45	44	49	43	40	26	7	44	36
16:00	57	39	42	47	40	35	6	45	38
17:00	71	76	62	75	88	12	11	74	56
18:00	21	20	18	22	12	6	4	19	15
19:00	6	17	12	11	6	6	9	10	10
20:00	10	6	10	4	3	3	1	7	5
21:00	3	11	10	9	2	0	2	7	6
22:00	4	6	2	12	2	1	0	5	5
23:00	0	0	3	2	0	2	0	3	2
Total	457	430	473	462	436	334	107	455	394

Hourly Volume Graph
6. Churley Rd. - South of Meadow Prigg.



ATC volume data – Chuley Road (garage) southbound



Job Number C0377
Client Urban-Flow
Project Ashburton Parking Beats - ATC
Location South of Meadow Prigg.
Site No. 6
Road Churley Rd.
Start Date 25-Sep-13
Direction Southbound

15 Minute Interval Volume

30 Minute Interval Volume

Menu

Volume Summary

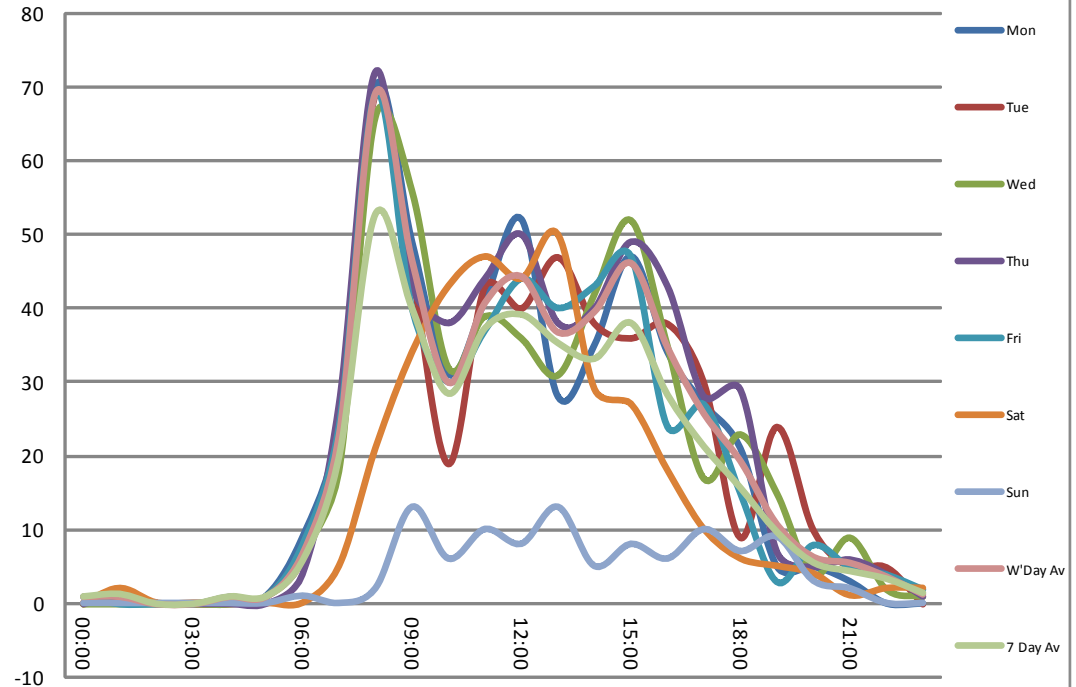
Average Weekday 495
7 Day Average 424

6. Churley Rd. - South of Meadow Prigg.

Southbound

Time	Day of Week							Ave W'day	7 Day Ave
	Mon 30-Sep	Tue 01-Oct	Wed 25-Sep	Thu 26-Sep	Fri 27-Sep	Sat 28-Sep	Sun 29-Sep		
AM Peak	70	69	66	72	69	47	13		
PM Peak	52	47	52	50	47	50	13		
00:00	0	0	0	0	1	0	0	1	1
01:00	0	1	0	1	0	2	0	1	1
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	0	0	1	1
05:00	1	1	1	0	1	0	0	1	1
06:00	9	6	7	4	8	0	1	7	6
07:00	24	21	18	27	24	5	0	23	20
08:00	70	69	66	72	69	21	2	69	53
09:00	49	45	56	43	40	34	13	47	40
10:00	31	19	32	38	30	43	6	30	28
11:00	41	43	39	44	37	47	10	41	37
12:00	52	40	36	50	44	44	8	44	39
13:00	28	47	31	38	40	50	13	37	35
14:00	35	38	42	40	43	29	5	40	33
15:00	47	36	52	49	47	27	8	46	38
16:00	34	38	35	43	24	18	6	35	28
17:00	27	30	17	28	27	10	10	26	21
18:00	21	9	23	29	15	6	7	19	16
19:00	5	24	15	7	3	5	9	11	10
20:00	5	10	4	5	8	4	3	6	6
21:00	3	5	9	6	5	1	2	6	4
22:00	0	5	2	4	4	2	0	4	3
23:00	0	0	1	1	2	2	0	1	2
Total	482	487	486	529	473	350	103	495	424

Hourly Volume Graph
6. Churley Rd. - South of Meadow Prigg.



ATC vehicle type data – Woodland Road



Job Number: C0377
Client: Urban-Flow
Project: Ashburton Parking Beats - ATC Report (6 S
Location: East of Vealania Ln.
Site No.: 3
Road: Woodland Rd.
Day: 25-Sep-13
Direction: Southbound N/A

Menu

Vehicle Class Summary

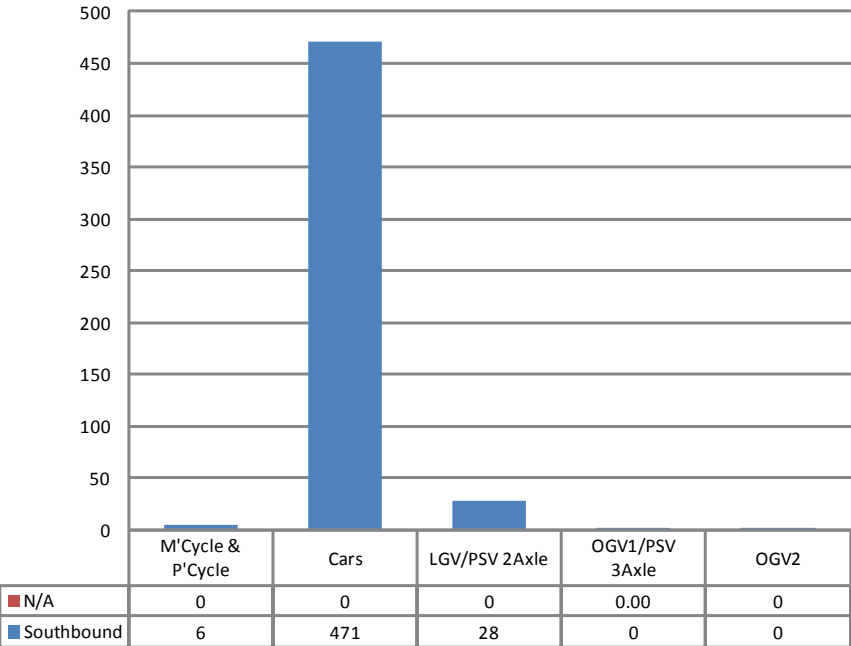
M'Cycle & P'Cycle	1%
Cars	93%
LGV	6%
OGV1 & PSV	0%
OGV2	0%

	Southbound						N/A						Combined					
	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
06:00	0	4	2	0	0	6	0	0	0	0	0	0	0	4	2	0	0	6
07:00	0	25	2	0	0	27	0	0	0	0	0	0	0	25	2	0	0	27
08:00	0	74	3	0	0	77	0	0	0	0	0	0	0	74	3	0	0	77
09:00	0	40	2	0	0	42	0	0	0	0	0	0	0	40	2	0	0	42
10:00	0	26	2	0	0	27	0	0	0	0	0	0	0	26	2	0	0	27
11:00	1	35	2	0	0	38	0	0	0	0	0	0	1	35	2	0	0	38
12:00	1	31	2	0	0	34	0	0	0	0	0	0	1	31	2	0	0	34
13:00	0	29	2	0	0	31	0	0	0	0	0	0	0	29	2	0	0	31
14:00	0	25	2	0	0	26	0	0	0	0	0	0	0	25	2	0	0	26
15:00	1	57	2	0	0	60	0	0	0	0	0	0	1	57	2	0	0	60
16:00	0	37	3	0	0	41	0	0	0	0	0	0	0	37	3	0	0	41
17:00	1	30	3	0	0	34	0	0	0	0	0	0	1	30	3	0	0	34
18:00	0	25	0	0	0	26	0	0	0	0	0	0	0	25	0	0	0	26
19:00	0	18	1	0	0	19	0	0	0	0	0	0	0	18	1	0	0	19
20:00	0	7	0	0	0	7	0	0	0	0	0	0	0	7	0	0	0	7
21:00	0	5	0	0	0	5	0	0	0	0	0	0	0	5	0	0	0	5
22:00	0	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2
23:00	0	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2

3. Woodland Rd. - East of Vealania Ln.

Weekday Aver

Vehicle Class Chart
3. Woodland Rd. - East of Vealania Ln.



ATC vehicle type data – Whistley Hill



Job Number: C0377
Client: Urban-Flow
Project: Ashburton Parking Beats - ATC Report (6 S
Location: South of Woodland Rd.
Site No.: 2
Road: Whistley Hill
Day: 25-Sep-13
Direction: Northbound Southbound

Menu

Vehicle Class Summary

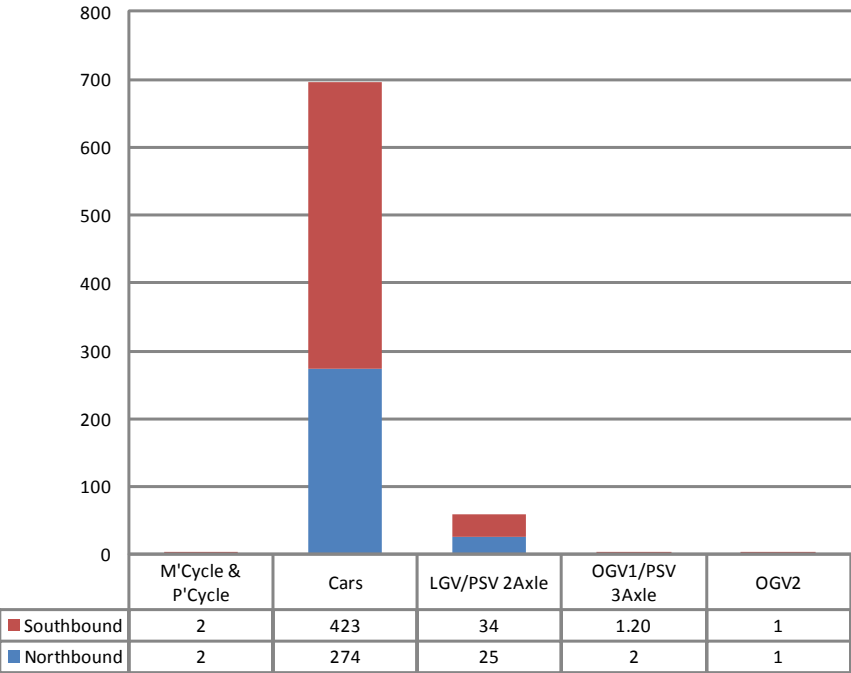
M'Cycle & P'Cycle	1%
Cars	91%
LGV	8%
OGV1 & PSV	0%
OGV2	0%

	Northbound						Southbound						Combined					
	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total
00:00	0	1	1	0	0	1	0	1	0	0	0	1	0	1	1	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
04:00	0	0	0	0	0	0	0	2	0	0	0	2	0	2	0	0	0	2
05:00	0	0	1	0	0	1	0	1	0	0	0	2	0	2	1	0	0	3
06:00	0	3	0	0	0	3	0	4	0	0	0	4	0	7	0	0	0	7
07:00	0	18	1	0	0	19	0	18	4	0	0	22	0	36	5	0	0	41
08:00	0	40	2	0	0	43	0	44	4	0	0	49	1	84	6	1	0	92
09:00	0	21	1	0	0	23	0	30	3	0	0	33	0	51	4	0	0	56
10:00	0	19	2	0	0	22	0	20	2	0	0	22	0	39	4	1	0	44
11:00	0	15	2	0	0	17	0	27	2	0	0	29	0	41	4	0	0	46
12:00	0	13	2	0	0	16	0	27	2	0	0	30	0	40	5	0	0	46
13:00	0	16	2	0	0	18	1	29	3	0	0	32	1	45	4	0	0	50
14:00	0	16	2	0	0	18	0	22	3	0	0	24	0	38	4	0	0	43
15:00	0	26	2	0	0	28	0	41	3	0	0	44	0	66	4	0	0	71
16:00	0	22	2	0	0	24	0	40	4	0	0	44	0	62	6	0	0	68
17:00	0	18	3	0	0	21	0	59	2	0	0	62	0	77	5	0	0	83
18:00	0	18	1	0	0	19	0	23	1	0	0	25	0	41	2	0	0	44
19:00	0	11	0	0	0	12	0	13	1	0	0	14	1	24	1	0	0	26
20:00	0	6	0	0	0	7	0	10	0	0	0	10	0	16	0	0	0	16
21:00	0	4	0	0	0	4	0	6	0	0	0	6	0	10	0	0	0	11
22:00	0	3	0	0	0	3	0	4	0	0	0	4	0	7	0	0	0	8
23:00	0	2	0	0	0	2	0	2	0	0	0	2	0	4	0	0	0	4

2. Whistley Hill - South of Woodland Rd.

Weekday Average

Vehicle Class Chart
2. Whistley Hill - South of Woodland Rd.



ATC vehicle type data – Chuley Rd (A38 bridge)



Job Number C0377
Client: Urban-Flow
Project: Ashburton Parking Beats - ATC Report (6 S
Location: North of A38.
Site No. 1
Road Churley Rd.
Day 25-Sep-13
Direction Northbound Southbound

Menu

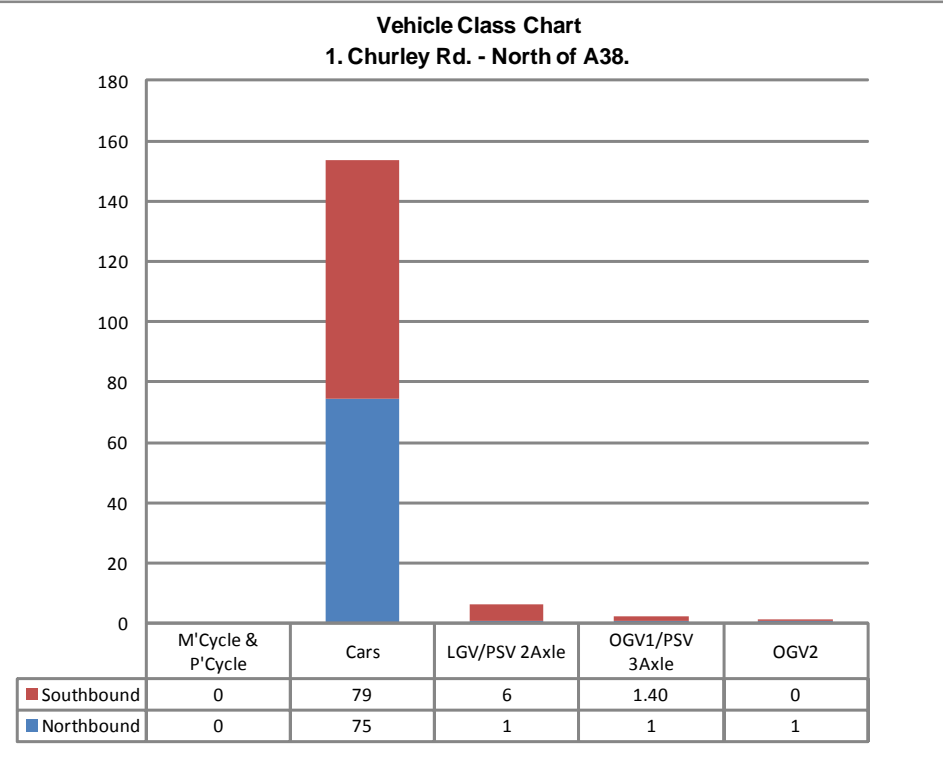
Vehicle Class Summary

M'Cycle & P'Cycle	0%
Cars	94%
LGV	4%
OGV1 & PSV	1%
OGV2	1%

	Northbound						Southbound						Combined					
	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1
07:00	0	2	0	0	0	2	0	2	0	0	0	2	0	4	0	0	0	4
08:00	0	6	0	0	0	6	0	7	1	0	0	7	0	12	1	0	0	13
09:00	0	10	0	0	0	10	0	3	1	0	0	4	0	13	1	0	0	15
10:00	0	6	0	0	0	6	0	5	0	0	0	5	0	11	0	0	0	11
11:00	0	4	0	0	0	4	0	6	0	0	0	6	0	10	0	0	0	11
12:00	0	5	0	0	0	5	0	5	1	0	0	6	0	10	1	0	0	11
13:00	0	6	0	0	0	7	0	4	0	0	0	4	0	10	1	0	0	11
14:00	0	4	0	0	0	5	0	5	1	0	0	6	0	9	1	0	0	10
15:00	0	10	0	0	0	10	0	9	1	0	0	10	0	19	1	0	0	20
16:00	0	5	0	0	0	5	0	6	0	0	0	6	0	11	0	0	0	12
17:00	0	6	0	0	0	6	0	12	0	0	0	13	0	19	0	0	0	20
18:00	0	3	0	0	0	4	0	5	0	0	0	5	0	8	0	0	0	9
19:00	0	4	0	0	0	4	0	2	0	0	0	2	0	6	0	0	0	6
20:00	0	2	0	0	0	2	0	3	0	0	0	3	0	4	0	0	0	4
21:00	0	0	0	0	0	0	0	3	0	0	0	3	0	3	0	0	0	3
22:00	0	1	0	0	0	1	0	1	0	0	0	1	0	2	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1. Churley Rd. - North of A38.

Weekday Average



ATC vehicle type data – St Lawrence Lane



Job Number C0377
Client: Urban-Flow
Project: Ashburton Parking Beats - ATC Report (6 S
Location: North of Churley Rd.
Site No. 4
Road St. Lawrence Ln.
Day 25-Sep-13
Direction Northbound Southbound

Menu

Vehicle Class Summary

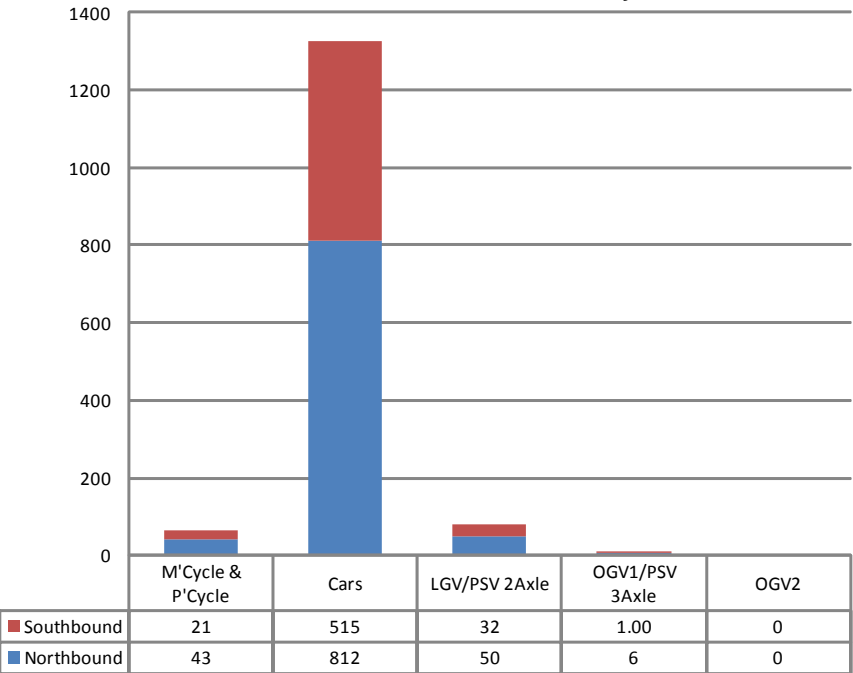
M'Cycle & P'Cycle	4%
Cars	90%
LGV	6%
OGV1 & PSV	1%
OGV2	0%

	Northbound						Southbound						Combined					
	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total
00:00	0	1	1	0	0	2	0	0	0	0	0	0	0	1	1	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
04:00	0	1	0	0	0	1	0	1	0	0	0	2	0	2	0	0	0	2
05:00	0	0	1	0	0	1	0	1	0	0	0	2	0	2	1	0	0	3
06:00	0	6	2	0	0	9	1	8	0	0	0	9	1	14	2	0	0	18
07:00	0	20	4	0	0	24	1	19	3	0	0	23	1	39	6	0	0	47
08:00	3	63	3	1	0	70	4	52	3	0	0	59	7	116	6	1	0	129
09:00	3	67	4	0	0	74	1	41	3	0	0	45	4	108	7	0	0	118
10:00	2	56	4	0	0	61	1	34	2	0	0	37	2	90	6	1	0	99
11:00	6	52	6	0	0	64	1	43	3	0	0	46	7	95	8	0	0	110
12:00	7	58	3	1	0	69	0	41	3	0	0	44	8	99	6	1	0	113
13:00	3	54	4	0	0	61	1	38	2	0	0	41	4	91	6	0	0	102
14:00	2	55	4	0	0	62	2	42	3	0	0	47	4	97	7	1	0	109
15:00	5	86	4	1	0	96	2	43	3	0	0	48	7	130	6	1	0	144
16:00	4	79	2	1	0	85	2	43	3	0	0	47	6	121	5	1	0	132
17:00	5	90	4	1	0	100	2	35	1	0	0	38	7	125	5	1	0	138
18:00	2	45	3	0	0	50	2	27	1	0	0	31	4	72	4	0	0	80
19:00	0	35	1	0	0	36	1	20	1	0	0	22	1	54	2	0	0	57
20:00	0	15	0	0	0	16	0	13	0	0	0	13	0	28	1	0	0	29
21:00	0	16	0	0	0	16	1	8	0	0	0	9	1	24	0	0	0	26
22:00	0	9	1	0	0	9	0	3	0	0	0	3	0	12	1	0	0	12
23:00	0	5	0	0	0	5	0	2	0	0	0	2	0	7	0	0	0	7

4. St. Lawrence Ln. - North of Churley Rd.

Weekday Aver

Vehicle Class Chart
4. St. Lawrence Ln. - North of Churley Rd.



ATC vehicle type data – Vealenia Terrace



Job Number C0377
Client: Urban-Flow
Project: Ashburton Parking Beats - ATC Report (6 S
Location: West of Woodland Rd.
Site No. 5
Road Vealenia Ln.
Day 25-Sep-13
Direction Eastbound Westbound

Menu

Vehicle Class Summary

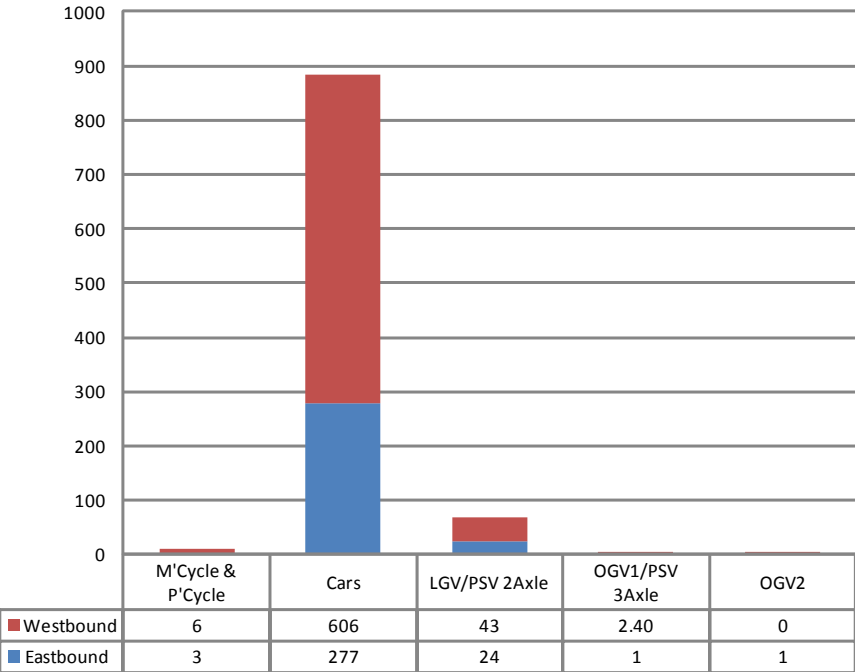
M'Cycle & P'Cycle	1%
Cars	92%
LGV	7%
OGV1 & PSV	0%
OGV2	0%

	Eastbound						Westbound						Combined					
	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total
00:00	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
04:00	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2
05:00	0	1	0	0	0	1	0	0	1	0	0	1	0	1	1	0	0	3
06:00	0	2	0	0	0	2	0	4	2	0	0	6	0	6	2	0	0	8
07:00	0	9	3	0	0	12	0	31	2	0	0	33	0	40	5	0	0	45
08:00	0	20	3	0	0	24	1	77	3	0	0	81	1	98	6	1	0	105
09:00	0	17	2	0	0	19	0	56	3	0	0	60	0	73	5	0	0	79
10:00	0	13	1	0	0	15	0	40	4	0	0	44	0	53	5	1	0	59
11:00	0	17	1	0	0	19	1	41	3	0	0	44	1	58	4	0	0	63
12:00	0	18	2	0	0	21	0	37	4	0	0	41	0	55	6	0	0	62
13:00	1	21	2	0	0	24	0	39	3	0	0	42	1	59	5	0	0	65
14:00	0	16	2	0	0	18	0	32	3	0	0	35	1	48	4	0	0	53
15:00	0	23	2	0	0	25	1	69	3	0	0	74	2	92	5	0	0	99
16:00	0	28	2	0	0	31	0	51	5	0	0	56	1	79	7	0	0	87
17:00	0	51	2	0	0	54	1	42	5	0	0	47	1	93	7	0	0	101
18:00	0	16	1	0	0	17	0	36	1	0	0	38	0	52	2	0	0	55
19:00	1	7	0	0	0	8	0	25	1	0	0	26	1	32	1	0	0	34
20:00	0	7	0	0	0	7	0	11	0	0	0	11	0	18	0	0	0	18
21:00	0	4	0	0	0	4	0	8	0	0	0	8	0	12	0	0	0	12
22:00	0	3	0	0	0	3	0	4	0	0	0	4	0	7	0	0	0	8
23:00	0	1	0	0	0	1	0	3	0	0	0	3	0	4	0	0	0	4

5. Vealenia Ln. - West of Woodland Rd.

Weekday Aver

Vehicle Class Chart
5. Vealenia Ln. - West of Woodland Rd.



ATC vehicle type data – Chuley Road (garage)



Job Number C0377
Client: Urban-Flow
Project: Ashburton Parking Beats - ATC Report (6 S
Location: South of Meadow Prigg.
Site No. 6
Road Churley Rd.
Day 25-Sep-13
Direction Northbound Southbound

Menu

Vehicle Class Summary

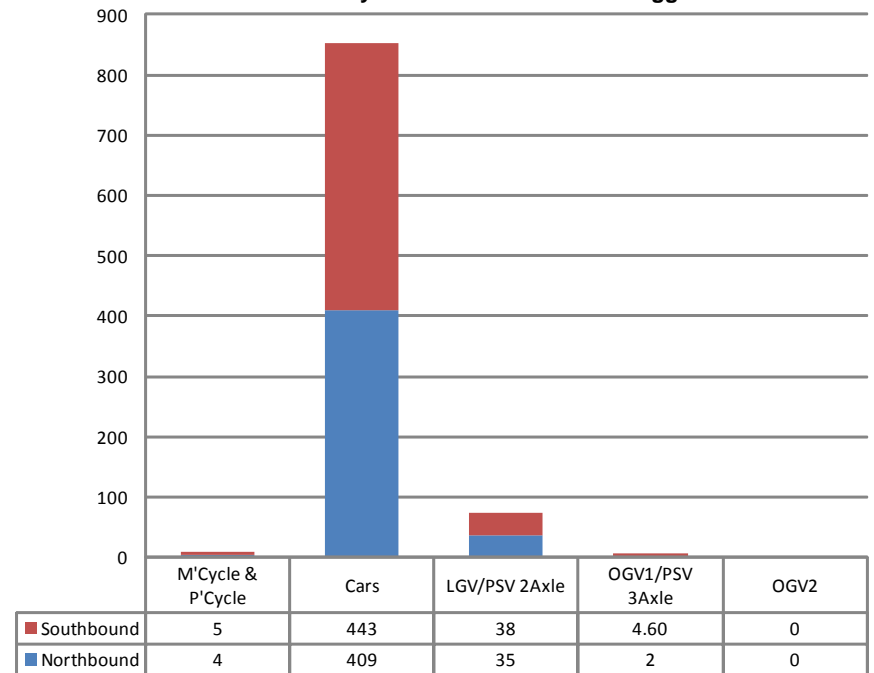
M'Cycle & P'Cycle 1%
Cars 90%
LGV 8%
OGV1 & PSV 1%
OGV2 0%

	Northbound						Southbound						Combined					
	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total	M'Cycle & P'Cycle	Cars	LGV/PSV 2Axle	OGV1/PSV 3Axle	OGV2	Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	1	0	0	1	0	1	0	0	0	1	0	1	1	0	0	2
06:00	0	2	1	0	0	3	0	6	0	0	0	7	0	9	1	0	0	10
07:00	0	6	3	0	0	10	0	19	3	0	0	23	0	26	6	0	0	32
08:00	0	21	5	0	0	25	0	65	3	0	0	69	1	86	8	0	0	95
09:00	0	30	3	0	0	34	0	42	3	1	0	47	1	72	6	1	0	80
10:00	0	24	3	0	0	27	0	27	3	0	0	30	0	50	6	0	0	57
11:00	1	28	2	0	0	31	1	36	3	1	0	41	2	63	5	1	0	72
12:00	0	36	3	0	0	39	1	39	5	0	0	44	1	75	8	0	0	84
13:00	0	30	3	0	0	33	0	33	3	0	0	37	1	63	6	1	0	70
14:00	1	31	4	0	0	35	0	35	4	0	0	40	1	66	8	0	0	75
15:00	0	42	2	0	0	44	1	43	2	0	0	46	1	85	4	1	0	90
16:00	1	42	2	0	0	45	0	30	4	0	0	35	1	72	6	1	0	80
17:00	1	71	3	0	0	74	1	22	3	0	0	26	1	92	6	0	0	100
18:00	0	17	1	0	0	19	0	19	1	0	0	19	0	36	2	0	0	38
19:00	0	10	0	0	0	10	0	10	1	0	0	11	0	20	1	0	0	21
20:00	0	6	0	0	0	7	0	6	0	0	0	6	0	13	0	0	0	13
21:00	0	7	0	0	0	7	0	5	0	0	0	6	0	12	0	0	0	13
22:00	0	5	0	0	0	5	0	3	0	0	0	3	0	8	0	0	0	8
23:00	0	1	0	0	0	1	0	1	0	0	0	1	0	2	0	0	0	2

6. Churley Rd. - South of Meadow Prigg.

Weekday Aver

Vehicle Class Chart
6. Churley Rd. - South of Meadow Prigg.



Quality Control		
Primary Author		John Emslie
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Reviewer		Simon Adams

Document Control		
Version	Recipient	Date Issued
Draft v1.9	Client Team	12/11/2013
Final v2.4	Client Team	03/01/2014