# Supporting paper Context, Evidence and Suggested Traffic Management Enhancements

## A1) The Parish Context

### A1.1) Demographics and Lack of Ready Access to Daily Living Services

According to the 2011 census (R1) there were 2075people living in 860households located in the villages of Thurcaston and Cropston; amongst whom:
510 were over 65 years of age
30 lone parent families
125single pensioner households (probably the most vulnerable)
55households did not have a car
The percentage of over 65 and single pensioner households is significantly higher than the national average.
It takes over 71minutes to get to the nearest hospital by public transport, which is nearly double the County average.
The Parish is far from self sustained**.** It does not have, within the Parish, access to any of the services or facilities listed in Table 1. This table shows estimated 'minimum round trip distances in km' between the junction of the two villages on the Leicester Road and the said nearest service access points; which mainly are located in Rothley, Anstey, Birstall and/or Beaumont Leys

| ***Does Not Have*** |
|---|
| Police Station (6) |
| Convenience Store (6) |
| Medical Centre (6) |
| Dentist Practice (6) |
| Pharmacy (6) |
| Post Office (6) |
| Bank Services (6) |
| Leisure Centre (10) |
| Secondary School (10) |
| Take Away (6) |
| Coffee Shop (6) |
| News Agent (6) |

**Table 1 List of Currently Unavailable Services and Facilities in Thurcaston**

On the other hand the two villages share a primary school, a village hall and parish church, all of which are located in Thurcaston. Also Cropston has a playgropund for children and a vehicle repair workshop.

### A1.2) Lack of Ready Access to Work

Other than for people working from home, there are very few workplaces within the Parish. Table 2 lists examples of employment types un-available locally. It also indicates the minimum distance in Km to employment access points for each type of work.

| ***Does Not Have*** |
|---|
| Local Authority Employment (12) |

| | |
|---|---|
| | Manufacturing Companies (12) |
| | Multi-person Retail Businesses (12) |
| | Multi-person Financial Businesses (12) |
| | Universities (12) |
| | Multi-person Logistics Businesses (12) |
| | Multi-person Construction Businesses (12) |
| | Leisure Businesses (10) |
| | Secondary Schools (10) |
| | |
| | |

**Table 2 List of Types of Work Unavailable in Thurcaston**

The Thurcaston and Cropston Parish population is largely of a professional nature (partially causally because it's housing is not generally 'affordable housing'). Hence the large majority of parishioners must travel mainly by car to their workplaces; normally in Leicester or Loughborough. Data describing outcomes of this situation are also recorded into Tables 3 and 4 below.

Table 3 summarizes the distances travelled to work by persons living in Thurcaston (R1)

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| | |
|---|---|
| Percentage working at home | 14.7 % |
| Percentage working less than 2km from home | 6.8 % |
| Percentage working between 2 and 10km from home | 44.5 % |
| Percentage working between 10 and 60km from home | 26.3 % |
| Percentage working greater than 60km from home | 3.4 % |
| Others | 4.2 % |
| All persons count | 713 |

Table 3: Distance Travelled to Work

Table 4 summarises the method of travel to work used by people living in Thurcaston The data analysed was last updated by the ONS in March 2011 (R2)

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| | |
|---|---|
| Driving a Car, Motor –Cycle or Moped | 52.7 % |
| Passenger in a Car or Taxi | 2.7 % |
| Riding a bicycle | 1.6% |
| On foot | 3.2 % |
| Bus, minibus or coach | 2.7 % |
| Others | 37.1 % |

Table 4 Modes of Transport to Work

Underlying data for Tables 2 and 3 were elicited via two separate ONS census (R1 and R2); hence the two data sets are not wholly consistent in terms of sample size, or their date of capture.

Nonetheless clear evidence is provided that shows that 'Access to Work' within the Parish is a critical concern: given that the National Policy Planning Framework emphasises the critical importance of sustainability and minimising travel to work distances when new housing planning decisions are made.

It is clear for example that a very small majority of the Thurcaston population (namely 6.8%) travel to a work place within a 2km radius of the village. Whereas a very significant majority (more than 75%) work further from their homes. Therefore those working further that 2km from the village outnumber local workers by ten times. Further only 5% of people travel to work by foot or bicycle. In combination these figures show that Thurcaston and Cropston are essentially both dormitory villages. It cannot therefore be legitimately claimed that either theThurcaston or Cropston population has 'READY ACCESS TO WORK'
2001 Car Ownership Data on the Thurcaston and Cropston ward was recorded into the WSP report (R3). Here reported 2001 Thurcaston census data showed that the average level of car ownership per dwelling can be calculated thus-

Number of Dwellings 850
Number of Cars Owned 1,374
Thus average Car Ownership per dwelling 1.6
This figure can be compared with the 2011 National average of circa 1.2 per dwelling. Indeed 2011 cencous data (R2) shows that 93% of households throughout the Parish own at least one car compared to 64% nationally.

### A1.3) Limited Bus and Rail Service Access

**The Current Situation**

Thurcaston and Cropston share the same bus service; a service which has diminished appreciably during the last decade. Now it is sufficient for regular use by only 1 in 37 people. Less than ten years ago there were three bus routes available to the Parish but primarily for economic and lack of use reasons two of those routes have been withdrawn.
The route of the remaining bus service passes through the centre both of Thurcaston and Cropston villages, although the bus stops are relatively remote from homes of a significant fraction of parishioners. This remaining service also serves many villages within the Charnwood Forest but has a convoluted and limited route, which neither directly connects parishioners to Rothley, Beaumont Leys, Anstey or Leicester, nor provides frequent and timely transportation to Loughborough.
The geographic centre of the Parish is situated approximately 10km north of Leicester Rail Station and 11km south of Loughborough Rail Station. Both stations are operated by East Midlands Trains serving stations between London St. Pancras and Sheffield. In terms of facilities Loughborough station has 180parking spaces available and 100cycle stands and is served by bus route 140. Leicester Station has 515parking spaces and 112cycle stands. However the limited bus service in the Parish makes car linkage to these rail services the only feasible option for business purposes except in exceptional circumstances.

**Potential Public Transport Improvements**

(I) Retain the present 154 service for Monday – Friday and the 123 service on Saturdays.
(II) Discuss with the operating companies the possibility of using existing profitable services, which serve Rothley, of being diverted through Cropston and Thurcaston to give better access to employment and recreational facilities. In addition by rerouting as suggested it would be possible to provide a Sunday and late evening service, neither of which exist at present.
(III) Leaving Rothley via Westfield Road and Station Road, then to Thurcaston via Leicester Road onwards to Birstall or through the developing Ashton Green and Beaumont Leys to Leicester.

(IV) As time progresses there may be the opportunity for the use of the Great Central Railway providing a service to Loughborough and Leicester during the rush hour period. This may well become viable in 6 to 8years with the housing growth planned in nearby villages, towns and city restricting access to cars etc.

### A1.4) Primary Road Network in the Parish

Figure A1 depicts the main road routes through the parish as well as some of the secondary roads (marked via dotted lines) on which some of the housing conurbations are located. This transport planning document is concerned primarily with traffic behaviours on the main routes which have been subjected to major increased loading in recent years.

Sections of all primary roads central to Thurcaston (namely Leicester Road, Mill Road and Anstey Lane) and Cropston (namely Station Road and a segment of Cropston Road) are currently subject to a 30mph speed limit. On Leicester Road this is enforced through the provision of traffic calming road humps. Station road continues on a north-east, south-west alignment continuing into Cropston to the south and Rothley to the north. Street lighting is provided along segments of Mill Road, Leicester Road, Station Road and Cropston Road.

Much of the housing in Cropston in located either on Station Road or on secondary roads located off Station Road. Although some Cropston housing is also located off Cropston Road and its connecting secondary roads and in Causeway Lane. Even though Station Road is the main Cropston thoroughfare, parking is permitted along much of its length. Only around a 100mtr segment of Station Road (between the Bradgate Pub and Cropston Cross Roads) has double white lines on both sides. Similarly except where existing traffic calming measures are used generally parking is permitted along Leicester Road, Mill Road and Anstey Lane; even though these are also prime thoroughfares through Thurcaston.

Cropston has two main entry roads feeding from the Charnwood Forest , namely Reservoir Road and Bradgate Road. Whilst Cropston Road is the primary entry road to Cropston from Anstey and and the M1/A46.

There is also a significant link road in Thurcaston ‘namely Rectory Lane’. This link road flows in an essentially north South direction to connect Leicester Road (at a Roundabout some 800m from the Wheatsheaf Pub) to Anstey Lane (some 650mtrs west of the Church}.

There is an existing footway provided along both sides of Mill Road with the footway on part of the western side elevated which is to allow access during times of flooding. To the north of Thurcaston on Mill Road, the footway on the eastern side stops prior to the bridge crossing the Rothley Brook but continues on the western side. The speed limit changes from 30mph to 40mph on the northern side of the Brook. Thurcaston Lane continues to Station Road to the north.

Leicester Road extends from Beaumont Leys to the south to Station Road to the north west of the site. Leicester Road as it passes through Thurcaston is subject to a 30mph speed limit and has traffic calming in the form of raised tables from a point just north of Chapel Close to a point approximately 100m south of Anstey Lane. Leicester Road runs in a straight road alignment.

Anstey Lane joins Leicester Road and Mill Road via a cross road arrangement. Anstey Lane continues in a south-westerly alignment joining Cropston Road to the south which in turn accesses the village of Anstey.

Crossing facilities in the form of uncontrolled refuge islands are provided on all arms at the cross road junction of Mill Road/Leicester Road and Anstey Lane.

In terms of connecting arterial roads, the nearest 'A' roads feeding the Parish are the A46 and A6.

The A46 continues on a west – east alignment south of Thurcaston and the A6 continues on a north – south alignment to the east of Thurcaston, these two roads intersect approximately 2km south east of Thurcaston, however in order to gain access to these roads vehicles would need to travel north through Rothley or south through Anstey.

Leicester Road is identified as a recommended cycle route linking to Cropston and Rothley to the north and Leicester to the south. In promotional literature, Mill Road and Anstey Lane have been identified as Leisure routes for cyclists. However in reality current traffic volumes and speeding behaviours make cycling on this route at least partially hazardous; and there are no formal cycle routes provided for service access. This is particularly true in respect of Cropston Road and its section which links Anstey Lane to the Cropston Road junction.

## A2) Current Parish Road Network and Emergent Traffic Behaviours

### A2.1) Independent Speed Study 2011: Conducted by WSP in Thurcaston Only

The WSP report (R3) was commissioned in 2014 by Mather Jamie Commercial Solicitors to conduct traffic surveys on Mill Road and Leicester Road using Automatic Traffic Counters which recorded 24hours over a one week period identifying directional traffic movements and speeds. The Traffic Surveys were carried out by 360 TSL for a one week period commencing 15th January 2014.
The results of the surveys are summarised in Table 5 together with the 85th percentile speeds recorded (R3).

**Table 5 – Traffic Survey Summary – Weekday**

The speeds identified were the average 7 day speeds between these times.
The survey undertaken by WSP was carried out for a one week period primarily to ascertain changes in traffic movements that occur throughout the day. The use of ATCs provided details of the type of vehicles and the speeds. The surveys were carried out during school term time and thus were considered by WSP to provide a typical weekly profile.

As can be seen there is a definite tidal traffic flow along both Mill Road and Leicester Road in the peak periods; with the main traffic flow travelling south on Mill Road and south east on Leicester Road in the AM Peak and reversed in the PM Peak.

The peak periods identified in the survey were;
(i) AM Peak – 0800 to 0900hrs
(ii) PM Peak – 1700 to 18:00hrs

The vehicle speeds on Mill Road were carried out at the point where the speed limit changes from 30mph to 40mph and a point central between the Mill Road/Anstey Lane junction and Rectory Lane junction on Leicester Road. The results of the surveys show that vehicles are exceeding the speed limit on Mill Road by some 18mph (55%) with vehicle speeds being higher southbound than northbound at a point 70m north of the Lanesborough Road access point.

On Leicester Road the speeds measured by WSP are only slightly higher than the 30mph speed limit; which may be as a result of existing traffic calming features along this route. However note that (a) later traffic surveys (see section A2.2) observed greater speeding issues on Leicester Road and (b) WSP averaged speeds over 24hours and hence this did not show peak speeds nor did it show tidal speed behaviours through the day. Critically the distinctively greater speeding problems on Mill Road are likely to be the result of very limited existing traffic calming measure throughout the narrow Mill and Thurcaston rural road sections.

### A2.2) More Recent Speeding Studies by Neighbourhood Speed-Watch Teams

To assist and report to Leicestershire Police, the following studies were undertaken by two speed watch teams.

**For Thurcaston (May,June 2014)**

(Data reported here was collected primarily by Alison Fletcher, Keith Pyne and Colin Revell over a 3 month period)

Total Vehicles Report sent to the police. 847 (All speed limits all roads)

Anstey Lane 30mph

| | |
|---|---|
| Total | 18 |
| Average Speed | 37.8mph |
| Highest | 43mph |
| | |
| 36 to 39mph | 15 |
| 40+mph | 3 |

Leicester Road 30 mph

| | |
|---|---|
| Total | 350 |
| Average Speed | 39.4mph |
| Highest | 52mph |
| 36 to 39mph | 223 |
| 40+mph | 123 |
| 50+mph | 4 |

Mill Road 30mph

| | |
|---|---|
| Total | 471 |
| Average Speed | 40.7mph |
| Highest | 62mph |
| | |
| 36 to 39mph | 225 |
| 40+mph | 228 |
| 50+mph | 16 |
| 60+mph | 2 |

Thurcaston Lane 40mph

| | |
|---|---|
| Total | 8 |
| Repeat Offenders | 54 x 2<br>6 x 3 |
| Kit deployed | Hand Held Radar |

-end of Thurcaston Speed watch data

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**For Cropston (May 2014 and September, October 2014)**

*(Data collection reported here was organised by James Clooney and collected by six Cropston residents on over approximately 26hrs during 15 separate days, morning and evening )*

A brief analysis of the findings follows.

Vehicles travelling below 36mph in a 30mph zone, or below 47mph in a 40mph zone were not recorded.

- 577 separate records were logged.....4.8% of these were repeat offenders
- 550 separate vehicles were recorded
- 22vehicles / 3.8% were travelling in excess of 47mph in a 30mph zone
- 196 / 33.96% were travelling between 40mph and 46mph in a 30mph zone
- 27vehicles were travelling at or in excess of 50mph.

  The highest recorded speed was 60mph in a 40mph zone

2nd set for Cropston for the last week of September 2014 and first week October 2014

| | |
|---|---|
| Total Vehicles sent to the police. | 321 (All speed limits all roads) |
| Leicester Road / Latimer Road 30mph | |
| Total | 1 |
| Leicester Road / Latimer Road 40mph | |
| Total | 2 |
| 180 Station Road 30mph | |
| **Total** | **178** |
| Average Speed | 40.4mph |
| Highest | 56mph |
| 36 to 39mph | 92 = 51.6% |
| 40+mph | 80 = 44.9% |
| 50+mph | 6 = 3.4% |
| Cropston Road 30mph | |
| **Total** | **38** |

| | | |
|---|---|---|
| Average Speed | 38.6mph | |
| Highest | 45mph | |
| | | |
| 36 to 39mph | 34 | = 89.4% |
| 40+mph | 4 | = 10.6% |
| | | |
| Station Road / Bradgate Road 30mph | | |
| **Total** | **102** | |
| Average Speed | 40.7mph | |
| Highest | 55mph | |
| | | |
| 36 to 39mph | 43 | = 42% |
| 40+mph | 56 | = 54.9% |
| 50+mph | 3 | = 3.1% |
| | | |
| Repeat Offenders | 11x 2 | |
| | 1 x 3 | |
| | | |
| Kit deployed | Hand Held Radar | |

-end of Cropston Speed watch data

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### A2.3) 2015 Traffic Congestion Studies

During June 2015 and July 2015 ten parishioners conducted traffic congestion studies across much of the Parish main road network. Bearing in mind the peak flow times previously identified by WSP (R3) primary focus of attention was paid to morning and afternoon peaks in flow.

Due to reporting constraints, herein only one set of representative data and its methods of measurement and analysis are discussed in outline. Any reader wishing to validate the measurement approach, analysis method and results obtained is referred to the power point presentation (R4). The data set obtained corresponded to a morning peak (between 0800hrs and 0900hrs on the 25th July 2015), a date within the primary school term. The ensuing results are therefore considered to be typical of mid 2015 weekday traffic behaviours- although as discussed elsewhere in this document the traffic situation in the Thurcaston and Cropston Parish is a dynamic one; with significantly higher levels of congestion occurring, with associated parking and safety problems emerging, as new Sustainable Urban Extensions (SUEs) are developed in the vicinity of the Parish.

The July 25th morning peak data was elicited simultaneously at ten locations around the Parish by positioning the ten members of the measurement team at the locations shown in Figure A2. Each member of the team completed a score sheet by recording traffic counts bearing in mind their direction of travel. Figure A3 shows one such sheet and the scores obtained which corresponded to six directional routes at the Thurcaston cross roads.

By taking this approach to simultaneous measurement the team could achieve a number of aims as follows:

(1) Bi-directional traffic flow rates at 26 road locations could be deduced by aggregating results from all ten score sheets- thereby extending the measurement coverage of traffic behaviours possible from a team of limited size

(2) Significant measurement errors to be detected before analysis by comparing measured flow rates at related/interconnected roads junctions

(3) Subsequent analysis of these multiple traffic flows allowed primary flow patterns to be deduced
(4) Also subsequent analysis of these multiple traffic flows allowed a differentiation to be drawn between 'through traffic' (with a journey that neither originated or terminated in the Parish during the measurement hour) and 'local traffic' belonging to the two villages
(5) Further subsequent analysis of these multiple traffic flows allowed the volume and flow rates of traffic entering and leaving the parish to be estimated with a high level of confidence
(6) An estimate of an overall measure of the traffic density in the Parish during the measurement hour to be evaluated and be used to compare with similar road systems elsewhere as a congestion indicator; having knowledge of the available surface area of the main road system in the Parish; i.e. by dividing the total traffic in the Parish by the available surface area.
The reader is refereed again to the attached PowerPoint presentation (R4) to view the logic and equations used to deduce (1) through (6).

Figure A4 shows one set of results obtained in respect to (3). This shows clearly which Parish road segments were under greatest congestion stress. Indeed sister measurements taken during the afternoon peak on June 2015 (and their related calculations) showed a remarkable similarity of traffic patterns but in reverse; showing mirror image morning and afternoon trends in flow.
For reporting purposes, the resultant congestion flow patterns are more simply-represented in the main body of this Thurcaston and Cropston Transport Planning Document (namely as Figure 1 which shows primary traffic flows in the Parish- see page 3 of the main policy document).
Having further analysed the July 25th traffic data for the Thurcaston and Cropston Parish, using logic and equations described in the attached Power point slides (R4), the following summary observations (i) to (iv) were made:

## A 3) Projected Impacts of Future Housing Growth on Traffic Behaviours in the Parish

Here Charnwood Borough and Leicester Council data is used to estimate the scale of housing development already planned in the vicinity of the Parish. It focuses on nearby 'Sustainable Urban Extensions (SUEs) 'already granted planning permissions by the relevant local authorities. The main purpose of this section is to begin to quantify the scale of additional congestion that will certainly arise in the current Parish transport network if no significant alleviating traffic actions are taken.

### A3.1) Major Housing Developments Planned- in the vicinity of the Parish

Following a circa 5 year programme of already completed major housing developments in SUEs near to the parish, Charnwood Borough and Leicester City planning authorities have sanctioned an even greater scale of housing developments during the next 5years and beyond. The primary SUE extensions of great relevance to the Thurcaston and Cropston Parish concern planned further developments in Rothley; Anstey; Birstall and Beaumont Leys conurbations.
This section outlines the scale and location (relative to the Parish) of those planned housing numbers and (where trustworthy data is available) estimates the scale of possible developments in the pipe line that have yet to be agreed by local authorities

1) The Ashton Green Development will lead to the erection of circa 3000new houses (R7) over the next five years. This SUE has been granted outline planning permission by Leicester City Council and will be located to the South of the A46; with the edge of that development being less than 1Km from the Southern boundary of our Parish. As Ashton Green will share with the Parish the same main sub-arterial road (namely Leicester Road) there is no doubt that without making major traffic management alterations a significant fraction of future Ashton Green traffic will pass through our Parish. If we assume that only 33 % of that traffic will impinge on our Parish, and that the average car ownership in Ashton Green will be the National average of 1.2 per household, then without traffic management change in TandC an additional ***circa 1,200 cars from Ashton Green*** alone will use our parish as a highway. This on its own could dramatically add to our existing traffic congestion and road safety problems

2) The indented table below (which is quoted from (R8) lists a total of 850houses that in recent years comprise developments in Rothley that are 'completed',' in progress' or 'given permission'. Many cars originating from those completed developments are already impinging on our Parish road network and this impact will inevitably grow as the yet to be completed houses come on stream. In addition two further SUEs are planned for Rothley. One of the two will likely be for 350houses located approximately 1km from the Eastern boundary of our Parish, the other for 250houses located towards Mountsorrel approximately 2Km from our parish boundary. By making predictive assumptions about traffic ratios (namely 33% of owned cars impinging significantly on TandC from the first Rothley SUE and 17% for the second Rothley SUE and a 1.2 national average vehicle per home ownership) we estimate that a further ***300 vehicles from Rothley*** will have a major impact on our Parish over the next 5years and beyond

Table of TOTAL 864 of recently completed, in progress or given permission in recent years (R8)

| Location | No. of Houses | Planning Ref. No. |
|---|---|---|
| Brookfield Farm (Athena) | 180 | P/12/1741/2 |
| West Cross Lane | 130 | P/14/0058/2 |
| Rothley Old School | 16 | P/12/1740/2 |
| Mountsorrel Lane | 250 | P/12/2002/2 |
| Town Green Street | 6 | P/14/0584/2 |
| Cossington Lane | 13 | P/11/0666/2 |
| Manor Holt | 14 | P/11/1431/2 |
| Park Farm | 6 | P/12/0244/2 |
| Park Farm | 7 | P/11/0666/2 129 |
| Mountsorrel Lane | 4 | P/13/0168/2 Annex 34, |
| Mountsorrel Lane | 1 | P/13/2027/2 42 |
| Mountsorrel Lane | 2 | P/10/1912/2 |
| Loughborough Road (Avalon) | 149 | P/08/3152/2 |
| The Grange, Fowke Street | 41 | P/05/1550/2 |
| Linkfield Farm | 45 | P/11/2150/2 |

3) Another SUE is planned for Anstey of circa 160 new homes; these developments will add further to recent housing increases of circa 2000 new homes in Anstey. The new Anstey SUE will be located approximately 1.5km from the Western boundary of our Parish. If we assume that 20% of the new Anstey traffic will impinge significantly on TandC and a 1.2 vehicle per home ownership then it is highly probable that ***100 further vehicles from Anstey*** will impact heavily on our Parish over the next 5years and beyond

4) Additional SUEs are also planned within Birstall, with a total of circa 1500new homes; such developments will add further to other recent new housing increases in Birstall since 2013. The new SUEs in Birstall will be located approximately 2.5km from the eastern and southern boundaries of our Parish. On the assumptions that 10% of the

new Birstall SUE traffic will impinge significantly on TandC and a 1.2 vehicle per home ownership we estimate that a circa further ***180 vehicles from Birstall*** will impact majorly on our Parish over the next 5years and beyond
It is evident that we must guard against major negative impacts of these projected ***additional circa 1780 vehicles from in the pipe neighbouring SUEs,*** which without action will flow daily through our parish (adding to already unsustainable peak flows of circa 3000vehicles per hour). It is imperative therefore those new traffic management actions be taken urgently to avoid a tipping point into very damaging and costly near future congestion and safety incidents. More than sufficient justification of need for such actions comes from the Core Strategy of Charnwood Borough Council –which states that its villages need protection to 'maintain the most treasured qualities of our region'.
In summary we have major concerns about imminent vehicular impacts of circa 1780 additional cars regularly travelling through our villages; a consequence on the construction of nearby SUEs. Critically it must not be forgotten that these new impacts will exacerbate further current problematic impacts arising from a) the current circa 3000vehicles per hour passing daily through our Parish at peak times which themselves (b) add to impacts of movements of circa 2800cars owned by our Parishioners, as they need to access workplaces and daily living and health services.
We conclude that ***immediate and innovative traffic management actions are essential*** to allow our largely rural transport infrastructure to cope during the next 5years and beyond. With that context in mind the next section builds a rationale for delivering improved best practice traffic management in Thurcaston and Cropston.

## A4) Key Traffic Management Issues and Recommendations for the Future

This section considers critical safety concerns across the Parish transport network. Those concerns have been identified via our consultations and have arisen consequent on high and growing volumes of speeding traffic passing along our rural roads; particularly where cars are normally permitted to park. This consideration is followed by a number of specific traffic management proposals that are aimed at reducing the level of safety risk at each location of concern.
Finally in this section we bring together the specific traffic management proposals into an expression of common safety concerns throughout the Parish that can be alleviated by adopting a set of improved traffic management policies.

### A4.1) Specific Areas of Growing Safety Concerns: Necessitating Improved Traffic Management in the Parish

We have consulted with parishioners as widely as possible, whilst seeking to take a methodological approach; where (a) we consider combined impacts of speeding, congestion and parking on safety at critical locations around our Parish road system then (b) characterising those impacts at each location, indicating current means used to managing traffic at those locations and (c) suggesting traffic management improvements which should mitigate safety problems and provide a measure of future proofing given expected increases in traffic levels over the next 5years.
Each primary problem location we have identified and observed via this process has been labelled into figure A5. Then with reference to that labelling the following dialogue was developed by the Transport Sub-Group in consultation with the TandC Neighbourhood Planning Steering Group and many of its parishioners.

#### A) At Reservoir Road Northern Entry into Cropston

<u>Current problem:</u>

Reservoir Road approaches Cropston along a 500mtr straight leading to a blind LH bend with a 60mph speed limit. Shortly after the bend a 30mph zone comes into force 10mtrs before a LH driveway (which provides entry into the Badgers Sett pub and restaurant) and 20mtrs before dangerous cross roads.
The current positioning of the 30mph zone and sign means that traffic enters the Cropston Cross Roads at excessive and un-safe speeds and potentially can cause accidents with respect to traffic entering the Badgers Sett
Potential improvement:
Move the start of the 30mph zone to 10mtrs before the LH bend with 'SLOW' signs on the road at the approach to the cross roads.

### B) At Cropston Cross Roads

Current problem:
Cars are failing to stop at the crossroad, particularly when coming from Anstey, along Cropston Road.
Cars coming out of Causeway Lane, and turning right, are in danger of being run into, on the driver's side, if traffic from the Anstey direction fails to stop.
The primary evidence collected related to safety problem B was elicited from findings of a traffic survey carried out by Clive Kitchen at the [Cropston Road, Station Road, Reservoir Road and Causeway Lane] junction on 23/04/2015 at 1530 to 1600hrs
Traffic was monitored at the stop sign in respect of vehicles travelling from the direction of Anstey:

| | | |
|---|---|---|
| Vehicles not stopping or barely slowing | 39 | (36% approximately) |
| Vehicles slowing but not stopping | 43 | (40% approximately) |
| Vehicles stopping because of other traffic | 13 | (10% approximately) |
| Vehicles stopping correctly | 17 | (14% approximately) |
| Total Vehicles 112 | | |

Potential traffic management improvements recommended

1) Have Rumble Strips on Cropston Road, to warn drivers approaching the crossroad.

2) Add a "Crossroad" sign, to the existing "STOP" sign, on Cropston Road, so that approaching drivers more fully appreciate why they must stop.

3) Install a large mirror at the crossroads, for the benefit of drivers pulling out of Causeway Lane, and turning right. Drivers will then be able to see if cars are approaching along Cropston Road, or not.

4) Make Causeway Lane a "Resident Only" controlled parking area, thereby reducing the traffic flows, in and out of the lane.

### C) At the Post Office on Station Road, Cropston

The problem:
When driving from the Cropston village crossroads, along Station Road in the direction of Rothley Station, drivers inevitably come across a line of parked cars, on the left hand side of the road.
The above requires drivers to move into the line of the on-coming traffic, in order to drive past this line of parked cars.
Any drivers, who are approaching in the opposite direction, may be faced with traffic coming straight towards them, on the wrong side of the road.
Hence the significant potential for accidents
Potential traffic management improvements:

1) Two “SLOW” signs should be erected on Station Road one outside Number 43, and the other outside Number 35.

2) Permit Holders Only Parking Spaces to be introduced between Numbers 36 and 56 Station Road, for Residents.

3) “SLOW” to be painted on the road surface, where beneficial.

### D) On Cropston Road at the segment between Cropston and the Anstey Road Junction

Current problem:

The road is too narrow to allow cars to safely overtake cyclists, particularly if a car is approaching in the opposite direction.

The danger to cyclists is very real, as any error of judgement by a driver when trying to overtake a cyclist, could easily lead to a cyclist being knocked off their bike, particularly if a car fails to properly overtake, due to traffic suddenly appearing from the opposite direction.

(This road is undulating, in the shape of a sign curve, so that oncoming traffic is sometimes hidden from sight, and can appear very quickly. The road is already designated as a “NO Overtaking” .

Potential traffic management improvements

1) Install a Cycle Lane, to the LH (southbound) side of the present Cropston Road, between Waterfield Road, in Cropston, and the turning left on to Anstey Lane, which leads to Thurcaston.

2) Significantly widen the existing path, for pedestrians walking from Anstey to Cropston, along Cropston Road, sufficient to add a marked out cycle lane, with a barrier to separate Cyclists from Pedestrians.

### E) At the Primary school, located in Thurcaston

Current problem:

Parent parking whilst delivering and collecting the children to and from school causes major problems for residents nearby- in particular, Wallis Close and on Leicester Road and Anstey Lane.

The time controlled 20mph Zone seldom works. Also there is no parking at the School.

Potential Improvements:

1. If possible for the School to alter its parking policy. For example the school might allow the creation of a dropping off area within the School grounds. If this does not prove practical/possible alternative parking areas nearby should be designated and ultimately for police officers to enforce good parking practice by imposing fines. (At the time of report writing the Transport Sub-Group continue to investigate possible parking solutions around the school, bearing in mind its importance and the complex issues involved).
2. The parents should agree initially to pilot a voluntary one way scheme using Anstey Lane and Rectory Lane (this has worked in the past). Ultimately the Transport Sub-Group believe that a perminantly operating one way scheme, such as that itemised in section A4.3, would alleviate many of the current school parking, child safety and congestion problems.

### F) At Thurcaston Crossroads

Problem

* Restricted vision to the right when emerging from Mill Road

* Restricted vision to the right when emerging from Anstey Lane
* Central refuge bollards are too close to the crossroads
* No enforced parking restrictions
* Bus route issues (as need to fit a 'quart into a pint pot', as some road sections where parking is permitted are simply too narrow to allow a bus to pass)
* HGVs and buses turning from Leicester Road into Anstey Lane and from Anstey Lane into Leicester Road are sometimes forced to mount the pavement to avoid hitting the central refuge bollards. This is aggravated by vehicles parking too close to the crossroads.

Potential Improvement

* Relocate central refuge bollards to provide adequate turning space for large vehicles
* Enforce legal parking restrictions
* Re route buses to use Rectory Lane instead of Anstey Lane past the school. This also enhances the bus service for residents to the south of the village

### G) At Double Bend where there is a Changing Camber on Mill Road

The problem

Recent speed watch studies show that on Mill Road traffic on average exceeds the designated 30 mph speed limit by around 150%. These speeds are frequently maintained around the double bend in the road some 100mtrs from Thurcaston Cross Roads. This problem is amplified because there is a significant change in camber around this double bend which make visibility and stability troublesome, and this occurs within 40mtrs of Lanesborough Drive and its associated housing complex. Regular safety incidences have occurred as a consequence; and there is potential for a very major accident. The danger and risk of accident is greatly increased by the fact that cars frequently and regularly park throughout this double bend stretch, either completely on the road or partially on the pavement.

Current traffic management:

30 mph speed limit only

Potential traffic management improvements

***1.*** Impose a continuous 20mph speed limit, rather than a time based one which does not work

***2.*** Deploy highly visible slow and bend signs

### H) Either side of the Blind Bridge on Mill Road

The problem:

The bridge over the Rothley brook occurs at a point on Mill Road where the current 40 mph speed limit for Thurcaston Lane changes to a 30mph speed limit on Mill Road. The bridge causes a raised section of the road, and this elevation change coupled with the vegetation around the bridge results in very poor road visibility on either side of the bridge. Yet on average traffic on the 30mph section of Mill Road exceeds that limit by more than 150%; including traffic as it approaches the Lanesborough Road housing complex and the blind bend described under G. As a consequence drivers approaching from Rothley have little warning about the likelihood of speeding oncoming traffic, and/or traffic joining from Lanesborough Road and/or possible road flooding (as typically flooding occurs at least once a year on the section of Mill Road next to the bridge).

Critically also Thurcaston Lane and Mill Road are both narrow rural roads such that speeding oncoming traffic can be extremely disturbing to drivers, pedestrians and cyclists alike. The above circumstances give rise to significant potential for accidents

near to the bridge throughout the year. This clearly requires traffic speed reduction and calming measures, particularly following ongoing increases in traffic volumes from outside the Parish. It is very questionable whether a 40mph speed limit is safe on much of this TandC road segment; as the stopping distances involved do not conform to the Highway Code recommendations even for the minority of traffic not exceeding designated speed limits.

Current traffic management:

30mph and 40mph speed limits only

Potential traffic management improvements

***1.*** Impose 30mph speed limit halfway along Thurcaston Lane up to the bridge, then impose a continuous 20mph speed limit up to Thurcaston cross roads

***2.*** Introduce a new sleeping policeman on the Thurcaston Lane side of the bridge entry

***3.*** Include warning/slow signs

***4.*** This route should be a definite no go for HGVs unless their speeds are restricted beyond that of other vehicles

***5.*** A white line is required along the middle of Thurcaston Lane and Mill Road throughout their length; this is essential to seek to avoid future head on, high speed collisions along this particularly narrow road section

***6.*** Installation of road centre 'cats eyes' as there is no street lighting along most of this stretch

### I + J + K) Along the length of Leicester Road

Current Problems:

Excessive speeding, current controls are ineffective. Congestion during morning and evening rush hours due to the extremely high levels of commuter traffic. No safe areas for pedestrians to cross. Additional housing development in nearby SUEs introducing even more traffic through the village.

Leicester Road is the link between Cropston and Thurcaston and a major transport route for the neighbouring villages giving direct access to Northern Leicester. Its total length within the parish is 1.3miles, with 0.7miles located in the built up area of Thurcaston. It is straight and hilly which encourages speeding. Within the village it is joined at a crossroads by both Mill Road and Anstey Lane feeding in high volumes of commuter traffic.

Current traffic management approaches

30mph speed restriction, with a temporary 20mph zone at school opening and closing times. At the junction of the Mill Road, Anstey Lane cross roads are pedestrian refuges specifically to help children and parents cross to the nearby school. In edition there are 4 speed ramps and one mini roundabout (where Rectory Lane joins Leicester Road). The location of the central reservation bollards and permanent inconsiderate parking makes very difficult the right turn from Leicester Road into Anstey Lane when travelling south; particularly for buses and other large vehicles.

Possible Traffic Management Improvements:
Introduction of more effective traffic calming measures such as chicanes (see above) which are proven to be effective in slowing traffic down and creating safer crossing areas for pedestrians.
The introduction of a time invariant speed limit of 20mph; starting at the Rectory Lane/Leicester Road roadabout and then along the length of Leicester Road through Thurcaston up to the junction with Station Road.
Re-routing the bus service via Rectory Lane. This has two benefits - it relieves the turning into Anstey Lane and at the same time opens the bus service to residents of the south end of Leicester Road by reducing the walk to a bus stop from 1.2km to 05km.
We also strongly recommend the taking of steps towards the future adoption of a one way system incorporating Anstey Lane and Rectory Lane, for example this may well have to be:

1. Traffic flow on Anstey Lane west from Leicester Road to Rectory Lane, incorporating Traffic flow islands
2. Traffic Flow on Rectory Lane east from Anstey Lane to mini roundabout on Leicester Road incorporating Traffic flow islands

### L) Anstey Lane: Western Entry

Current Problem:
As the road enters the village it veers right and immediately drops sharply past the church where groups of people gather and park for church services, weddings and funerals etc. and close to the right turn junction into Rectory Lane.
Currently:
30mph sign 30mtrs before the drop. There is no warning of the possibility of people in the road or an imminent right turn road junction.
Potential Improvements:
The provision of a warning sign of congestion and pedestrians in the road.
Sleeping policeman before the church.

### M) Cropston - Bradgate Road between Station Road and Swithland Road

The problem:

This road section forms part of a route between the Thurcaston and Cropston villages and Loughborough and Leicester. There is heavy traffic during rush hours, see Figure A4. At weekends there is significant traffic to and from Bradgate Park.

Traffic heading out of Cropston on Bradgate Road travels downhill at high speed but within sight of the national speed limit signs. This is a particular problem with motorbikes and fast drivers. The bend just outside the village boundary is sharper than normally expected and has a neutral to negative camber.

On average every year two cars approaching Cropston take the bend too fast and crash into the ditch between the bend and the Cropston village sign - crossing the verge used daily by dog-walkers. Note photographic evidence showing example accidents is provided in the Saftey Audit which accompanies this policy document.

There is limited pavement on one side of the road from Station Road to No.8, and thereafter only grass verge leaving the village. Pedestrians are typically ramblers and dog walkers and are exposed to danger from both speeding traffic and partially restricted visibility.

Current Traffic Management

Approaching the bend from each direction there is a triangular 'bend' warning sign and "Slow" written in the road. When travelling out of Cropston, the warning sign is on the RH side of the road and not easily visible. The "Slow" sign in the road is in line with the national speed limit signs thereby giving conflicting instructions. There are 2 small chevron signs on the bend, but they have a low visibility profile and are often at least partially obscured by uncut roadside vegetation and graffiti.

Suggested Potential improvements

1. Extend the 30mph area to include the bend. If this is not possible, introduce a 40mph buffer.

2. Paint sharks teeth in the road, so as to visibly reduce the width of the carriageway. The position of these should be approaching the bend from both directions.

[NB: Not in favour of rumble strips - too noisy for residents.]

3. Put larger high visibility chevron signs on the bend.

### A4.2) Generic TandC Road Safety Issues: Necessitating Overall Traffic Management Policy Improvements

#### A4.2.1 Parking: as a parish-wide source of safety issues

Parking is a parish wide problem. It is a problem without an easy solution due to the nature of the road system and housing in the two villages.

The underlying issues are:-

A) Due to the type of housing, many residents have no off road parking. Also their nearest on-road parking may often be taken by non residents as a matter of convenience to allow them to go walking etc.

B) Secondly very commonly cars are parked on pavements without a thought for any disabled person, mother with pushchair etc. Also generally there is a total lack of driving intelligence by parking on blind bends, gateways, bus stops etc. and by so doing causing danger to pedestrians and other road users.

Potential Improvements:

* Introduce and enforce controlled parking zones at designated road sections within the Parish
* Resident Only Parking Permits in critical areas, especially for Wallis Close in Thurcaston and Causeway Lane in Cropston.
* The use of enforced restricted parking where a dangerous situation exists, e.g. blind bends, crown of a hill etc., as identified in the Highway Code.
* Enforce Highway code laws 243 and 244
* Enforce fines for illegal and dangerous parking
* Approach local land owners close to school and village hall for land purchase or lease for car parking.

#### A4.2.2 Speeding: as a parish-wide source of safety issues

Speeding is a parish wide problem

Vehicles exceeding the legal speed limit enter and leave Thurcaston and Cropston on all routes; namely Mill Road, Anstey Lane and Leicester Road (essentially from both

north and south) and Reservoir Road, Cropston Road, Bradgate Road and Station Road (essentially from east, west and south)

Currently

Designated speed restrictions are ineffective and in the centre of the two villages. Significantly greater restriction is needed to reduce safety risks to an acceptable level. This is because:

* The norm is for 40mph and national speed limits to immediately become 30mph speed limits with no intermediate speed reduction or warning
* The TandC Rural road and parking system mitigates against safe travel at greater that 20mph through its centre
* Existing signs are obliterated by overgrown, uncut roadside vegetation
* Ineffective sleeping policemen have been deployed for many years

Potential Improvement

* Relocate 30mph signs
* Install speed countdown signs - i.e. at 300mtrs, 200mtrs and 100 mtrs.
* Impose a 20mph restriction throughout all central road sections of the two villages
* More roadside vegetation needs cutting back
* Sharks teeth markings on road surface on village approach roads, as appropriate
* Deploy high profile Thurcaston and Cropston village signs- e.g. planters
* Deploy more effective styles and locations of sleeping policemen
* Deploy additional sleeping policemen, as appropriate - especially on Mill Road
* Enforce speed fines
* Double fine for repeat offenders

### A4.3) Summary Findings and Proposed New Traffic Policies

The forgoing evidence gathering and analysis has led to the formulation of new traffic management ideas and policies listed in the main policy document. An underlying strategy has been to identify entities and locations at greatest risk, now and in the near future, and then to seek semi-generic traffic management solutions which can be reasonably adopted to mitigate and future proof against safety risks through much of the two villages, whilst bearing in mind the need to customise solutions to unusual safety issues.

The outcome has been the proposals to move as quickly as possible towards:

(i) ***Establishing a 20 mph speed limit on all main roads central to both villages;***
(ii) ***Slowing traffic entering the Parish to establish safe travel;***
(iii) ***Re-routing traffic near to the Primary School; and***
(iv) ***Minimising safety impacts from on-road parking.***

Bearing in mind the body of evidence reported in this document, Figure A6 outlines the Transport Sub-Group's speed limit proposals Parishwide. Further the Sub-Group recommend that the Parish Council establish a dialog with Highways Authorities to determine the feasibility of implementing the speed limit changes proposed. This is of great importance as it would significantly improve the quality of life within the Parish and provide some measure of future proofing against the Parish effectively becoming a primary transport infrastructure for up-coming Charnwood Borough and Leicester City Council SUEs.

Figure A7 illustrates a traffic re-routing scheme under present consideration by the Transport Sub-Group. Such a scheme has significant potential for alleviating many of the parking, safety and congestion problems that occur in Anstey Lane on an ongoing basis. This would be particularly true on weekdays and during periods of major activity at the School, Church and Village Hall. Furthermore this kind of traffic re-routing scheme could complement well that of a one-side of the road parking only arrangement; where the chosen side will need to reflect the nature of housing and off road parking provision and the bends in Anstey Lane and Rectory Lane and thence the likely extent to which safety risks will be mitigated.

**References**

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R2: ONS Data at http://ukcensusdata.com
R3: WSP 2011 report compiled for Mather Jamie which can be obtained via Charnwood Borough Council in relation to their - Outline Planning Application P/14/1308/2
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