Impact of traffic in the Parish of Burton and Dalby

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Background

In 2020 the impact of traffic was highlighted as the most important issue for residents of Burton and Dalby Parish.

This primarily related to:

- Speeding Traffic
- Impact of MMDR and additional traffic through the villages
- · Rat- running through Great Dalby
- The Parish Council commissioned Edwards & Edwards Consultancy Ltd (EAE) to monitor traffic within the three major settlements and to produce a presentation/report to
 - Provide an assessment of traffic conditions within the settlements
 - · Respond to concerns identified in the survey
 - Highlight significant road safety issues that require action
 - Highlight data that should be used to monitor the MMDR
 - Provide recommendations for future surveys



In addition, we have also highlighted options for addressing the concerns of the residents

Following surveys undertaken by the parish council in 2020 in connection with the Neighbourhood Plan, the impact of traffic was seen as the most important issue for residents.

A range of concerns were raised by residents in connection with traffic through the parish:

- 1. Speeding traffic through the parish's three settlements, particularly at:
 - a. Burrough End, Top End, Main Street and Woodgate Hill, Great Dalby
 - b. A606 Melton Road and Cross Lane/Sawgate Road Burton Lazars; and
 - c. Little Dalby.
- 2. The impact of the proposed Melton Mowbray Distributor Road on traffic flows through the parish's three settlements;
- 3. Rat running, where drivers use residential streets and other streets not intended as shortcuts instead of main roads designed to handle larger volumes of traffic. The principal concerns being:
 - a. Drivers using Woodgate Hill/Burrough End instead of the B6047 Great Dalby;
 - b. Drivers passing through Burton Lazars on the A606 using the route through Little Dalby as a means of accessing the B6047 at Great Dalby and then on to Leicester using Station Road (via Scraptoft);
- 4. Speeding motorcyclists on the B6047 between Melton Mowbray and Market Harborough, part of the route dubbed the "Rutland TT". In August 2023, the MP for Melton and Rutland

launched a campaign calling for average speed cameras.

In response, Burton and Dalby Parish Council commissioned Edwards and Edwards Consultancy Ltd (EAE) to prepare a traffic monitoring specification for Leicestershire County Council to undertake data collection to address items 1 to 3 above, using:

- 1. Pneumatic tubes to measure vehicle classification, direction, volume and speed; and
- 2. Automatic Number Plate Recognition (ANPR) technology to determine the origin and destination of vehicles.

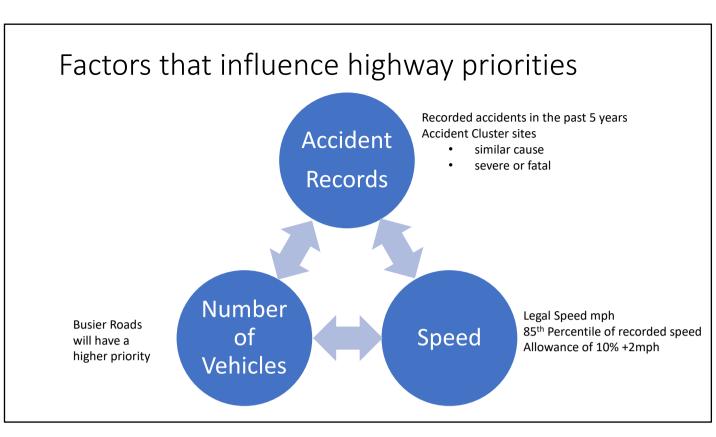
Pneumatic tubes were laid in 11 locations over the period 19 May to 6 June 2023 (excluding the school holiday period of 29 May to 4 June). ANPRs were installed on 23 May in five locations.

This report accompanies a presentation made to the Burton and Dalby Parish council in November 2023 on the analysis and interpretation of this data to:

- 1. Provide an assessment of traffic conditions through the three settlements (Great Dalby, Little Dalby and Burton Lazars);
- 2. Respond to the specific concerns of residents as identified in 1-3 above;
- 3. Identify any significant road safety issues that arise that require further action by the police, highway authority or parish council;
- 4. Highlight data that should be used as a benchmark to monitor the implementation of the Melton Mowbray Distributor Road;
- 5. Provide recommendations for future traffic surveys

In addition, EAE have looked at possible options to address the concerns of the residents based upon the evidence and findings of the surveys

The report is made up of the slides together with an explanation of the contents



No single factor is used to determine whether a location is safe or unsafe. When looking at a location the first metrics to be considered are the accident records, vehicle numbers and speed.

Accident Records can be obtained from the County Council. However, a summary of information can be found on crashmap.co.uk

Data and speed records were obtained via 'tubes' placed on the highways

Contents • Summary of the results Community Speedwatch Initiative • Including Mobile Vehicle Activated Signs • Leicestershire Highways: A Road to Zebras · Resource on possible interventions within Leicestershire Quiet Lanes • Shared spaces for low trafficked lanes Details and Discussion of MMDR Diversion Issues and options Great Dalby for addressing the Little Dalby concerns of the Burton Lazars residents

Note accident data is upto July 2022.

Overview

 MMDR Routing through villages



Only 4 vehicles recorded travelling in/out of Melton Mowbray on the A606 and travelling through the villages to Great Dalby

Great Dalby



There are no accident clusters. The worst locations for speed are

Main Street opposite the pub in both directions (5.7% of vehicles in both directions are travelling over 35mph Borough Road Eastbound (9% of Eastbound traffic is over 35mph)

Consider Community Speedwatch and/or Mobile Vehicle Activated Sign. Also chicanes/Speed Cushions

Traffic diverting from B6047.

10% of vehicles are diverting (all these are cars and small vans)

Leads to an increase of 138 daily vehicles on Burrough Road. This is around 15% of the ~900 vehicles on this road Options for increasing the attractiveness of B6047 or decreasing the attractiveness of Burrough End are considered

Little Dalby



Traffic volume is low, and no accident clusters

West of Manor Farm. 45% of vehicles above 35mph,
East of Church Walk on the S-bends speeds. 9% of vehicles above 35mph
Consider Community Speedwatch and/or Mobile Vehicle Activated Sign also new signs, Village Entry treatment

Burton Lazars



No accident clusters

Only evidence of speeding is southbound out of the settlment where ~10% of vehicles exceed 45mph Consider Community Speedwatch and/or Mobile Vehicle Activated Sign also new speed reminder signage

For the MMDR routing a baseline has been obtained which shows that in a 12 hour period only four vehicles travelled in/out of Melton Mowbray on the A606 and through the three settlements to access the B6047 or Station Road in Great Dalby. This will provide a baseline against which future observations can be compared once the MMDR is operational.

In Great Dalby the evidence showed that around 10% of vehicles using the B6047 diverted around Burrough End to travel through Great Dalby. This totalled around 70 vehicles in each direction in a 12 hour period. An average day saw 883 vehicles recorded on Burrough End. The diverting vehicles accounted for around 15% of recorded vehicles on Burrough End

For the three settlements we have shown that there are no recorded accident cluster sites, and we have shown where vehicles are travelling above the local speed limit. This data in unlikely to lead to immediate prioritisation of any of the locations by the Highways Authority or the Police. However, in this report we have setout a number of measures that the parish may wish to consider to build up more evidence and to address some of these concerns.

In this report we have also included a number of resources which can help the parish understand the options and costs of implementing any schemes:

- Community Speedwatch
- · Leicestershire Highways: A road to Zebras
- Quiet Lanes

Community Speedwatch

- https://www.communityspeedwatch.org.uk/
- Run By Leicestershire County Council and Leicestershire Police
- · Open to parishes
- Requires a minimum of 12 volunteers within the parish to run the scheme
- Minimum of 200 signatures or 20% of village/community support
- Use handheld speed guns to detect vehicles. The information is sent to the police who issue a letter
- At the end of the scheme the police consider option of enforcement visits
- Also option to purchase Mobile Vehicle Activated Signs
 - https://www.communityspeedwatch.org.uk/mvas-schemes/
 - https://leicestershirehighways.org.uk/traffic-schemes/vehicle-activated-signs-vas/
 - £6,000 to purchase the sign (£13000-17500) including installation
 - This can be moved around between sites



This is a scheme run by Leicestershire County Council and the Leicestershire police to gather evidence on speeding and to warn drivers who are caught speeding. In addition the scheme offers the opportunity to purchase a vehicle activated sign which can be moved between locations.

Details of the scheme are provided in the link

Leicestershire Highways

A Road to Zebras

- https://leicestershirehighways.org.uk/
- From the Website:
 - This website outlines the different traffic schemes that are available to improve roads in the local area or help solve a local issue.
 - Estimated costs and conditions for each of the options are shown to help to assess whether it will be appropriate for your community.
 - Leicestershire County Highways provide the information you need to enable informed discussions to be held with other residents through community groups, local organisations, parish or town councils together with county councillors. Detailed requests will then be reviewed and assessed by Leicestershire County Counci

Leicestershire County Council have provided this page which sets out the types of interventions that are available within the county. The page sets out the purpose, pros and cons and costs of each type of intervention.

Quiet Lanes

- Championed by Campaign to Protect Rural England (CPRE)
 - https://www.cpre.org.uk/wpcontent/uploads/2019/11/quiet lanes 1.pdf
- No information has been found on the Leicestershire County Council website.
- · Essex County Council has a set of criteria
 - https://www.essexhighways.org/uploads/lhp/m g/11 ecclhpmembersguidequietlanesb.pdf:
 - Narrow , single track roads
 - Less than 1000 vehicles per day
 - 85th percentile speed less than 35mph



Quiet Lanes have been championed by the Campaign to Protect Rural England (CPRE). The objective is to reprioritise the road-space on lightly used roads for all users. There is no information on the Leicestershire website about their policy related to these types of intervention. However, Essex County Council have a policy which covers narrow single track roads with less than 1000 vehicles per day where 85% of the traffic is travelling at less than 35mph.

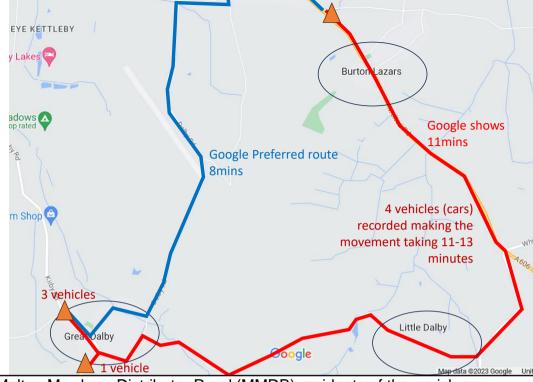
MMDR

Currently no evidence of any significant volumes of traffic to/from Melton using the A606 and traveling through the 3 villages.



ANPR camera

Automatic Number Plate Recognition



With the opening of the Melton Mowbray Distributor Road (MMDB) residents of the parish are concerned about the possibility of vehicles using the new road and travelling through the three settlements to access the B6047 and Station Road in Great Dalby.

The route of concern is shown in red. The survey showed 4 vehicles making the movement during the 12 hour survey. These vehicles took between 11 and 13 minutes which is comparable to the 11 minutes estimated by the Google Maps journey planner. Google Maps shows the preferred route is through the edge of Melton which is 4 minutes faster

This now gives us a baseline for the number of movements. Once the MMDR is complete a follow up survey can be commissioned to determine whether more vehicles are using this route.

Great Dalby

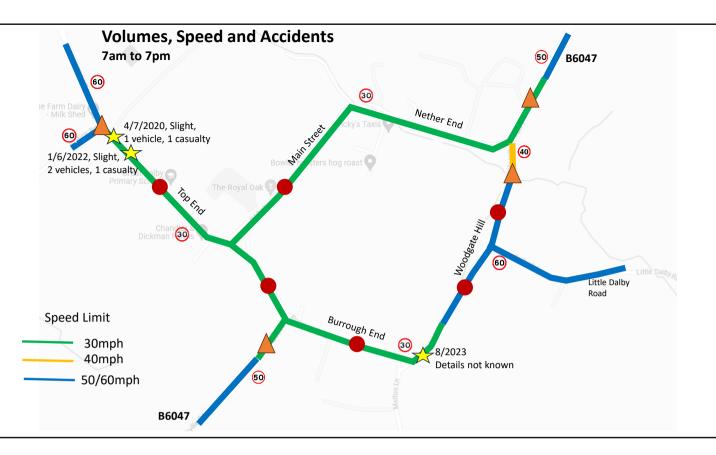
Focussing firstly on Great Dalby we will look at

- Accident Cluster sites
- Rerouting off the B6047 onto Borough End
- Speeding

The report will then address options for addressing the issues identified

Using data from

Great Dalby Speed Surveys.xlsx ID07097 Burton and Dalby - ANPR Trip Chain Report - 23_05_2023 - Rev Bii.xlsx



The map shows a road overlay of Great Dalby with the colours of the lines denoting the speed limits

Accidents

There were 2 accidents in the 5 years upto summer 2022. Both accident were recorded as resulting in slight injuries. Slight refers to an injury of a minor character such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment.

There is no history of accident clusters.

More details can be obtained from the parish through the Parish contacts with the County Council.

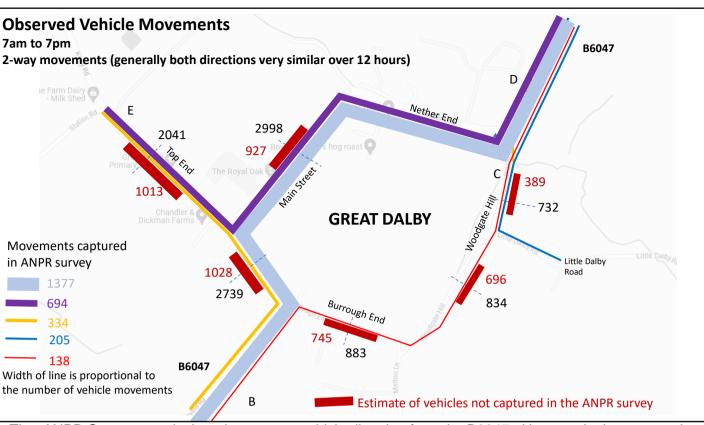
Locations for the traffic surveys

There were 6 locations where tubes were installed across the road (red dots) and 4 locations for the ANPR (orange triangle)

The tubes measure the following in each direction

- Average daily traffic volumes (7am to 7pm)
- Vehicle classification (Lorry, car etc)
- Average speed
- 85th percentile speed. 85% of vehicles travel below this speed. 15% of vehicles travel above this speed

There were 4 locations (yellow triangle) for the ANPR to record the traffic diverting from the B6047, and for the MMDR diverting through Top End



The ANPR Survey was designed to capture vehicle diverting from the B6047. However it also captured movements between Top End and the B6047 and the B6047 in the North and Little Dalby Road

The lines show the routes with the width of the line being proportional to the 2-way traffic volume. The volume is shown in the key. The two directions are generally symmetrical – eg Northbound is the same as southbound etc.

For the B6047 Diversion:

- On the day of the survey 8% to 10% of vehicles passing through Great Dalby on B6047 use the Burrough End Route
- All diverting vehicles are cars or small vans (upto transit size /3.5tonnes)
- The actual volume is low:
 - Daytime (offpeak): 1 to 4 vehicles per hour (<1 vehicle every 15minutes)
 - Peak: 10 to 13 vehicles (1 vehicle every 5 minutes) (Northbound: 0800 to 0900 and 1500 to 1600 and Southbound 1700-1800)
 - Outlier: 20 Northbound between 0700 to 0800 (1 vehicle every 3 minutes)
 - Average: 70 during the day in each direction (1 vehicle every 10mins)

The ANPR survey doesn't show the vehicles that only pass one camera

This will be traffic that:

- Starts or finishes a trip within Great Dalby
- Travels between Top End and the Little Dalby Road
- Travels between the B6047 in South and the Little Dalby Road

By combining the tube and ANPR data we can estimate the number. The short red lines on the map shows the vehicles that haven't been captured in the ANPR survey..

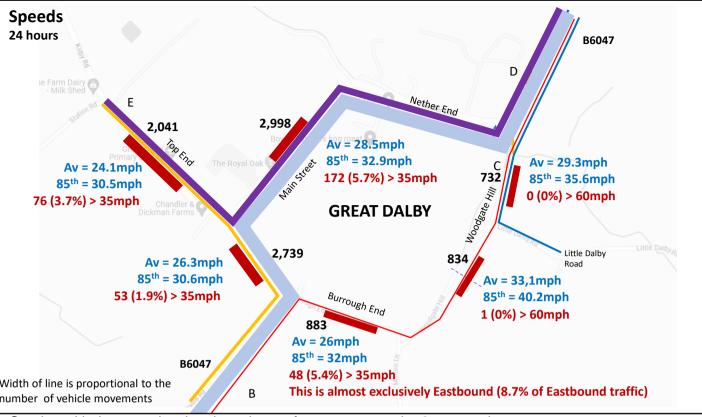
Overall within the village

- the greatest volumes of vehicles is on the B6047 approximately 3000 vehicles per day in both directions
- Followed by Top End Road (approx. 2/3 of of B6047 traffic)
- Followed by Burrough End and Woodgate Hill (approx. 1/3 of B6047 traffic)

85% of the movements on Burrough End are not related to the B6047 diversion and are most likely to/from Little Dalby Road

- Traffic generated in the village
- Traffic to/from the B6047 to the south
- Traffic To/From Top End

However, traffic volume is only one dimension. We also need to look at speed at each of the locations



Starting with the map showing the volume of movements at the 6 survey sites.

The vehicles volumes counted at each of the tubes is shown in black text.

The key parameters used to assess speed are

- Average speed: speed at which an average motorist will travel
- 85th Percentile speed: 85% of the vehicles travelled below this speed.

To add a little more context the numbers of vehicles which would lead to police considering prosecution has been added. This is 35mph in a 30mph zone. The Police typically use the formular 10% +2mph to determine whether to prosecute.

These numbers in conjunction with the accident data would not lead the Police or the Highways authority to consider these locations as a priority for immediate action.

- Woodgate Hill is well within the speed limit
- Top End: is only marginally above the 30mph, however there is a school.
- Burrough End: speeding was almost exclusively East Bound 85th percentile 33.2mph (highest in Great Dalby) - 8.7% of eastbound traffic > 35mph
- Main Street: speeds were very similar in both directions

Great Dalby – Issues Summary

Accidents and Speeding

- Accidents: There are no accident cluster sites.
- Speeding: 85th Percentile is only just above 30mph

Burrough End (Eastbound), Main Street and Top End have the highest speeds

Diverting from B6047

 Burrough End does see traffic diverted from B6047.



This is a small proportion of the trips. Most of the vehicles use Borough End to access the Little Dalby Road.

The County Council & Police would be unlikely to consider this to be a high priority area for their immediate action

Issues:

Accident Cluster sites- None identified

Speeding – all sites show 85th percentile slightly above 30 mph. The highest are:

- Burrough End Eastbound
- Main Street
- Top End

Diverting traffic from B6047. This has been observed with around 8%-10% of movements on the B6047 divert to use the Borough End route. The amount of the diverted traffic accounts for around 15% of the total volume on Borough End

There are a number of measures that can be considered in Great Dalby, however these are unlikely to prioritised by County Highways forimmediate action.

Focussing on Main Street and Burrough End

Very simplistically:

- If we reduce attractiveness of Main Street (eg reduce speed limit) it will make Burrough End more attractive
- If we increase attractiveness of Main Street (eg increase speed limit) it will make Burrough End less attractive
- If we reduce attractiveness of Burrough End it will make main street more attractive

Great Dalby - Possible Interventions

- · Speeding on Borough End, Main street and Top End
 - Consider the Community Speed Watch initiative
 - · Consider a Mobile Vehicle Activated Sign
 - · Consider other options from the County Council website
- Traffic diverting from the B6047
 - Make the B6047 through Great Dalby more attractive
 - Increase the speed limit on B6047 through the village to 40mph
 - Ban parked cars. Google shows parked cars. Does this occur more in evening/overnight?
 - Make the undesirable route less attractive
 - Residential Zone signage
 - · Chicanes/Speed humps on Burrough End
 - 20mph on Burrough End
 - Block Burrough End near junction with Melton Lane to prevent through traffic
 - · One-Way on Woodgate Hill
- · Reduce traffic on Burrough End
 - · Signs on Little Dalby Road directing traffic along Woodgate Hill to A6047
 - Signs on A6047 directing traffic via Woodgate Hill to Little Dalby

There may be issues when attempting to deliver transport interventions





- Enforcements
- Unpopularity of measures

Speeding. The primary recommendation would be to investigate the Community Speed Watch Scheme and/or consider the purchase of a Mobile Vehicle Activated Sign. There are also options related to addressing speeding traffic such as speed cushions, speed tables and chicanes which are detailed on the County Council website. However these can be unpopular and there can be negative impacts such as increased noise, pollution and safety.

Diverting traffic from B6047. This does occur. The amount of the diverted traffic on Borough End accounts for around 10% of the total volume recorded on the road. There are signs banning HGV movements along Burrough End

Options to reduce traffic diverting are:

Making B6047 more attractive: The objective is to encourage drivers to remain on this road rather than diverting. Examples of options include increasing the speed limit, or if parked cars are a problem look at yellow lines to ban parking.

Making the Burroughs End Route Less attractive. The objective is to encourage drivers to remain on the B6047. Possible options are suggested. Hovever making changes on this route will also affect traffic to/from Little Dalby. This may result in vehicles diverting to use Woodgate Hill and the B6047 through Great Dalby.

Reducing Traffic on Burrough End

Burrough End may not be the preferred route to access the Little Dalby Road. The finger signs show that this is a preferred route.

The objective is to encourage traffic to use the Woodgate Hill route via Main Street

Note that there are a number of issues that will arise when considering these measures



Mini parked on the highway causing vehicles to wait

Winners and Losers & Unintended Consequences

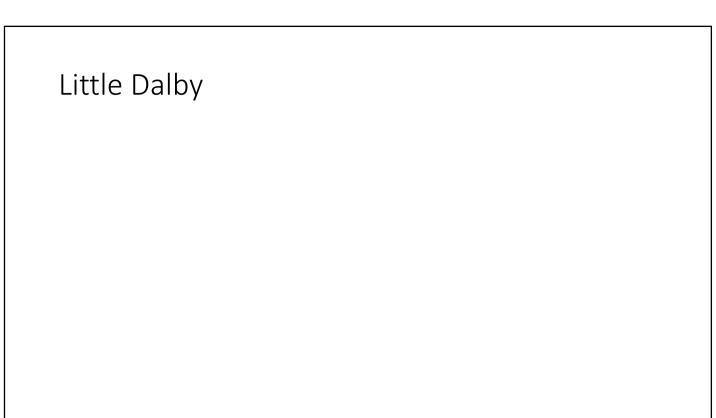
- Decrease of traffic on Burrough Eng will result in increased traffic on Main Street / Nether End
- Increase noise and pollution from accelerating/deaccelerating traffic from speed cushions
- Chicanes can cause issues for cyclists and increase pollution as vehicles are idling whilst waiting

enforcement.

• 20mph and parking are not readily enforceable and may not be supported by County Highways.

Some Interventions may be unpopular with residents and motorists

- Speed humps are not popular amongst some groups of motorists
- The changes may result in people having more inconvenient or longer journeys.



In Little Dalby we will look at

- Accident Cluster sites
- Vehicle Volumes and Speed

The report will then address options for addressing the issues identified

Using data from Little Dalby Speed Surveys.xlsx

Little Dalby



West of Little Dalby

Is speed a safety risk?

- No accidents have been recorded
- Volumes are low 597 daily
- It is on a straight section of road with good visibility
- No residential frontages
- Access to farm at the survey location

East of Little Dalby

Is speed a safety risk?

- · No accidents have been recorded
- Volumes are low 576 daily
- The bends will limit the speed
- one residential frontage

The County Council & Police would be unlikely to consider this to be a high priority location.

Measures:

- Community Speed Watch and/or Mobile Vehicle Activated Sign
- Entry Treatment to village at 30mph sign
- Signage to warn of farm vehicles outside farm

Measures:

- Community Speed Watch and/or or Mobile Vehicle Activated Sign
- Entry Treatment to village at 30mph sign

There have been no recorded accidents in Little Dalby in the accident database which covers the past 24 years

The speed limit is 30mph through the settlement and reverts to the national speed limit a considerable distance from the Gartree Hill Road and Church Walk junctions. From a drivers perspective the nature of the road does not materially change whilst driving through Little Dalby.

Traffic Surveys were undertaken to the west and east of these junctions.

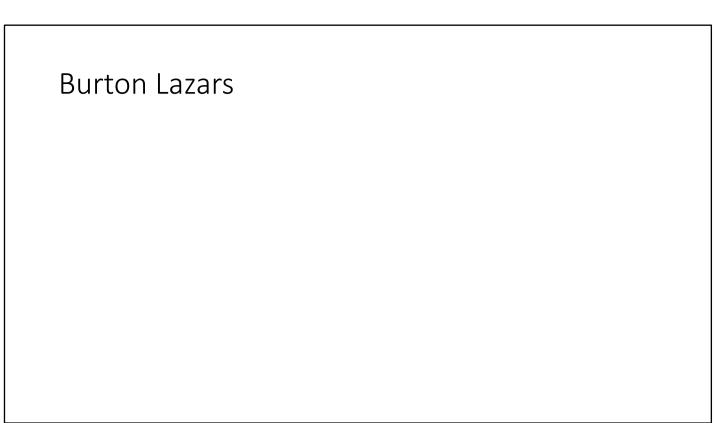
The daily volume of vehicles is low, however there is evidence of vehicles exceeding the 30mph speed limit particularly in the West.

- · 45% of vehicles are over 35mph in the west
- 9% of vehicles are over 35mph in the east

Is it a safety Risk? Given the low volumes of traffic, in a rural location, with no recorded accidents, without any frontages and generally good visibility it is unlikely to be a County Council or Police priority area. This is reflected in the correspondence between the parish and the county council in 2021.

The Parish could consider a number of options for reducing speed and changing the nature of road through the village, including:

- Community Speedwatch and/or a Mobile Vehicle Activated Sign
- Entry treatment to village to demark the extent of the settlement and 30mph limit
- Other signage such as Dragons teeth which give the impression of road narrowing
- Quiet Lane. Note: It is not certain that Leicestershire offer this designation, nor whether this road would qualify.



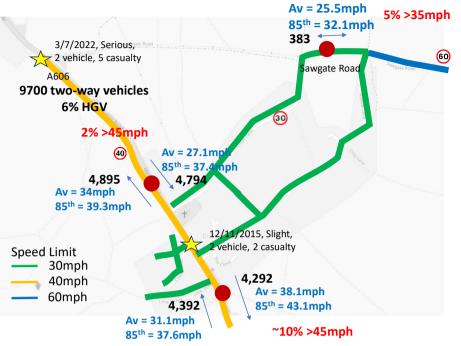
In Burton Lazars we will look at

- Accident Cluster sites
- · Vehicle Volumes and Speed

The report will then address options for addressing the issues identified

Using data from Burton Lazars Speed Surveys.xlsx

Burton Lazars



Summary of Issues

- No accident clusters
- · Speeds are within the normal range

The County Council & Police would be unlikely to consider this to be a high priority area.

Possible Measures

- Community Speedwatch and/or Mobile Vehicle Activated Sign
- A606:
 - 40mph reminder signs on entry/exit of the built up area
- Sawgate Lane:
 - · Additional 30mph reminders

Burton Lazars lies on the A606 which has a speed limit of 40 mph through the settlement. The side roads are limited to 30mph.

No accidents have been recorded within the settlement of Burton Lazars within the past 5 years. However, there was an accident in 2022 at the junction with Sawgate Lane and an accident in 2015 near the New Road junction

Traffic Surveys were undertaken at 3 locations: Two on the A606 and one on Sawgate Road

A606

- Traffic Volume on the A606 is around 9700 vehicles per day
- with around 6% HGV's.
- Traffic volumes Northbound and Southbound are similar
- Speed is below 40mph on 3 of the directions (2% are travelling above 45mph)
- Speed is above 40mph southbound to the south of the settlement (~10% of vehicles are travelling above 45mph)

Sawgate Road

- 383 daily vehicles
- 5% of vehicles above 35mph

There are no accident clusters and speeds are within the normal range. The police and County Council would be unlikely to consider this a priority area.

However, you may consider:

- A606:
 - Community Speedwatch

- Mobile Vehicle Activated sign
- 40mph reminder signs on entry/exit to the built up area
- Sawgate Lane:

 - Community SpeedwatchMobile Vehicle Activated sign
 - additional 30mph reminders

Results and Conclusion

- The study has provided a robust evidence base of the traffic conditions within each of the three larger settlements.
- This can be used to assess the impact of growth and the opening of the MMDR which could lead to increased traffic and the increased risk of drivers using unsuitable routes or speeding
- Using the County Councils data collection team to collect the traffic data means that the data will not be challenged.
- Whilst the current evidence does not suggest the issues will be immediate priorities for the Highways Authority or the Police the data will provide an important layer of evidence related to your concerns.
- In each of the settlements a number of options for addressing the concerns have been identified which will allow a discussion with residents on their priorities and will facilitate future discussions with the highways authority.
- The top priority would be to investigate the community speed watch programme and consider the purchase of a Mobile Vehicle Activated Sign.

The traffic data collection strategy that wase commissioned by the Parish has provided you with a robust base year of traffic data across that Parish that can now be used and be built on over subsequent years. It is expected that traffic levels will rise along with the increased risk of general traffic using unsuitable routes though the Parish and an associated risk speeding.

As you are fully aware a change in your highway environment can be negatively impacted by a number of future factors including, but not limited to, general growth, specific localised development or the opening of the MMDR.

This baseline traffic data, collected by Leicestershire Council Councils own traffic data collection team, is not challengeable by the Local Highway Authority for obvious reasons. If this baseline data can be built on at regular intervals it will provide the Parish with a robust evidence base and strengthen the Parish's position related to any future conversations with the Local Highway Authority / Police related to traffic issues.

Whilst the concerns identified by the residents are unlikely to be prioritised for action by the Police or the Highways Authority, the surveys will provide an additional layer of evidence related to speeding and inappropriate routing. The report also suggests a number of options that you can discuss with residents and will facilitate engagement with the Highways Authority,

Joining the community speedwatch programme would seem to be an early priority together with the consideration of purchasing a Mobile Vehicle Activated Sign.

Future Monitoring

The data collected has provide an essential benchmark against which changes to traffic volumes and speed can be measured.

Possible future monitoring could include:

- MMDR (undertaken once the MMDR is open)
 - ANPR on A606 and Great Dalby for assessing impact of MMDR on traffic diverting through the villages..
 - speed/volume on A606 at one location following completion of the MMDR.
- Speed/Traffic Volume Survey in each settlement
 - Annual or Two Yearly survey in at least one one location in each settlement to assess the impact of growth within the Parish..
 - · Consider alternative location for the Sawgate Lane Monitor east or south of the junction with Hollow Lane
- B6047 diversion through Burrough End
 - Now we have a baseline of the proportion of vehicles diverting it may not be necessary to regularly repeat unless there are specific concerns that there are specific factors that are changing the volumes of diverting vehicles.
 - · Regular monitoring of Burrough End using tubes will allow any changes in the volumes and speed to be assessed

It will not be necessary to repeat all the surveys each year, instead a sub-set would most likely be appropriate to assess the impact of the MMDR and to address speed and traffic volume in each of the settlements.