

Road traffic through Stansted Mountfitchet an Overview as at February 2020 - update July 2020

Introduction:

There are constant comments accompanied with frequent complaints from residents that Stansted Mountfitchet (SM) highways are overloaded to such a level that they are close to gridlock resulting in frequent traffic jams and air pollution and noise and damage to buildings.

With increasing traffic on our highways air pollution is increasing bringing greater health hazards caused by NO₂ and microscopic particles known as PM_{2.5} and sub-micron particles which are only recently being identified as dangerous to human health. These pollutants are recognised by the World Health Organisation (WHO) as a cause of Respiratory and Cardiac premature deaths. This pollution is caused by the combustion of petrol and diesel fuels and particles from tyres and brake pads. Stansted airport exacerbates this issue as was highlighted during the UTT/18/0460/FUL Planning Application determination meeting at UDC on 17th and 24th Jan. 2020. One of our highways is known to be affected by all of these issues, Grove Hill, the B1051.

As a consequence, it was considered appropriate to collate as much factual information as possible from various authorities and interested parties concerning the change of road traffic in and around SM and to include reference to Uttlesford District Councils (UDC) Air Quality Annual Status reports. In addition to this report a Stansted Mountfitchet Parish Councillor made a number of proposals to improve traffic flows in the settlement, they being, reducing the width of a few of the very wide pedestrian walkways, as yet the proposals have not produced any improvements.

It is expected that new vehicle technologies will reduce pollutants from road vehicles but this is not expected to have a significant effect on air pollution for some years. The introduction of "Ultra Low Emission Vehicles" is rather slow at the time of this report. Also, HGV's and medium size vans seem to be lagging far behind the introduction of ultra-low emission vehicles.

The recent rejection of UDC Local Plan is expected to result in more speculative development proposals resulting in more houses which will exacerbate an already critical situation for SM and surrounding communities.

Vehicle growth data for Essex, Hertfordshire and Uttlesford has been obtained from the Governments Vehicle Licensing Statistics website and used to emphasise vehicle growth. Also, Governments statics have been used to establish the growth trends in the registration of "Ultra Low Emission Vehicles".

Stansted Mountfitchet (SM):

This settlement is in the District of Uttlesford and located in the southwestern part about 2 miles north of Bishops Stortford in Hertfordshire and 2.5 miles to the west of Stansted airport.

There are 4 main highways running north/south in Uttlesford, the M11 about 1 mile to the east of SM, the B1383 runs through the centre of SM and about 10 miles to the east is the B184. The B1051, Grove Hill/Elsenham Road, carries traffic from Lower Street SM to the settlements of Elsenham and Henham and further north/east. The A120 is 1 mile south of the settlement and carries traffic east and west.

This highways layout results in “local” traffic from nearby settlements passing through SM on the B1383 to connect with the M11 and Bishops Stortford and settlements further south and the A120 for traffic wanting to travel to Great Dunmow and further east or west to the A10 and the M1. See map below

The M11 motorway has a major junction, junction 8, 2 miles from the settlement, the next M11 junction is junction 9 some 10+ miles to the north, thus making the B1383 the principle strategic North to South route within Uttlesford District. To the south is Junction 7 close to Harlow, some 10 miles from SM.

There is one relatively new highway close to SM, the A120. All the roads passing through SM have experienced very little change to improve their capacity handling capability for more than 50 years.

Highways Bottlenecks:

It is necessary to consider road traffic densities and some of the obvious reasons why their capability is limited. Grove Hill, Chapel Hill, Church Road, High Lane and Cambridge Road have restricted capacity due to various types of bottlenecks the details of which are below.

B1383 Pines Hill/Silver Street;

This road carries more traffic than any other of our highways, its bottleneck is at the top of Pines Hill by the Old Bell pub where the pedestrian walkway is approximately 500 mm's wide, the road is 5.75 metres wide. This road carries very heavy and large HGV's.

B1051 Chapel Hill;

Is a steep hill, 1:10 gradient, with resident parking on the south side from the fire station to the road named Woodfields. The Parish Council has given much thought to this bottle neck resulting in the introduction of residents parking a few years ago, there is no alternative nearby area for off street parking for these residents. Frequently vehicles travelling down Chapel Hill drive on the pedestrian walkway. See photo below.

Church Road;

At the time of writing this report there are few traffic densities issues on this road. The main issues relate to excess vehicle speed and the traffic calming “build-outs”.

The village Speed Watch team operates at sites specified by Essex Police, the Church Road Speed Watch location is by Churchfields. The Speed Watch team “Record” many vehicles leaving the village travelling at 40+ mph. Some residents say the build-outs are not operating as the village Highways Committee had hoped, vehicles risk collisions by “jumping” the priority. Even where there are no “build-outs” busses and HGV's have difficulty passing each other in opposite directions, the road is too narrow and one vehicle will travel on the pedestrian walk-way to pass risking pedestrian safety. Another bottleneck along this road is the railway bridge, often called “Wing Mirror” bridge due to the number of wing mirrors knocked off when vehicles pass each other in opposite directions. Church Road has one other issue, many people including school children use the narrow pedestrian walkway and are particularly exposed to soakings by passing vehicles in wet weather. The kerbside gullies are often blocked.

B1051 Lower Street;

The consequence of kerbside parking on both sides of this road restrict its effective width to a single carriage way resulting in frequent traffic congestion. SM Parish Council Highways Committee has made detailed proposals which include narrowing part of the westside pedestrian walkway yet maintain more than adequate width for pedestrian safety. It is believed this would improve vehicle parking but more importantly, widen the effective carriageway to improve traffic flows, it is understood Essex Highways finds this proposal unacceptable. See details below. The road is dangerous for pedestrians to cross; a long-awaited new pedestrian crossing is being constructed at the time of writing this report.

B1051 Grove Hill/ Elsenham Road;

Grove Hill is the main highway to and from Elsenham and Henham and destinations further north. Close to the junction of it and Lower Street it's a single carriageway 3.92 metres wide. It is frequently used by Heavy HGV's which exceed the sign posted 7.5 tonnes weight limit, it is also used by wide HGV's which also exceed the weight limit, see photo below, there is no width restriction. Buildings and parked cars are often damaged by HGV's. Urgent attention is need to this road to such a degree that residents held a meeting during July 2020 to agree the issues and to develop an "Action Plan" and then invite the appropriate authorities to a meeting to progress concerns. It seems that Essex Highways does not record its use, the author of this report calculated that 4967 vehicles use it during a working weekday. The road is increasingly used as a direct result of the many dwellings recently built and being constructed in Elsenham and Henham. There are minimal facilities in these villages which result in the occupants driving to SM and Bishops Stortford significantly increasing traffic using Grove Hill and other SM highways. Action to reduce traffic flow is an URGENT need. A Freedom of Information request has been made to Essex CC for factual information concerning the use of this road.

B1351 High Lane;

This highway is not an issue in terms of excess traffic but the village Speed Watch team often record vehicles greatly exceeding the 30-mph limit.

B1383 Cambridge Road;

This highway carries all traffic serving the villages between Stansted Mountfitchet and Saffron Walden and south to the A120 and Bishops Stortford. The northern part from Chapel Hill is the second most used highway in our village and its growth is high. Between Cambridge Road/Chapel Hill junction and Clarence Road there is kerbside and pedestrian walkway parking (see page 12) in places on both sides of the road, and on the east side only after Clarence Road. The Parish Council Highways Committee has considered in detail the road traffic issues in the area where there are shops and has proposed ways to reduce/minimise traffic issues. They include reducing the width of the wide Pedestrian Walkway on the west side creating "Laybys" enabling vehicle parking for shopping purposes only which should resulting in improved traffic flow. Progress with the appropriate authorities is very slow due to administration inertia.

Road Traffic densities:

To understand current use of the highways and the growth of traffic, reference has been made to Essex Highways and Government Vehicle Licensing Statistics (VLS) data. It is also considered wise to understand the development of dwellings in the area particularly to the northeast along the B1052 in Elsenham and Henham but other places also.

At the end of 2017 there were 37.7 million licensed vehicles on Britain's roads. 18 months later this had increased to 38.7 million. VLS Annual report 2017 page 4 states: - The number of licensed vehicles in Great Britain has increased by an average of 640,000 vehicles p.a. since 2012. In England 33.121 million vehicles had been registered by 2019. Essex recorded 960,400 registered vehicles in 2018 of which 68,100 were in Uttlesford. Vehicle growth in Uttlesford is 14.5%, in East Herts its 8.2% compared with 2012. Uttlesford's vehicle growth is greater than the England average, England's average growth has been 11.1% since 2012.

This growth is partly due to more vehicles per household, Uttlesford has an average of 1.7 vehicles per household compared with the England average of 1.3 vehicles. The number of dwellings in the area has also increased. For example, there are over 913 additional dwellings in Stansted Mountfitchet since 2011 and in Elsenham, 516 more and a further 130 have planning approval, 709 await planning determination. Henham is a smaller settlement, since 2011, 87 dwellings have been constructed. An increasing number of households are purchasing their daily needs and other goods "Online" and having them delivered to their homes by van which are generally diesel vehicles.

The author has omitted the total number of dwellings being constructed in Bishops Stortford, but currently there are over 2500 in nearby Bishops Stortford north. The development of dwellings north of Stansted Mountfitchet along the B1383 in settlements such as Ugley and Quendon and Newport have not yet been included in this report.

Bearing in mind the 720 dwellings now all occupied in the new Foresthall Park estate there are over 1500 additional vehicles on SM. Additional traffic due to Elsenham developments is over 870 vehicles. It is not surprising therefore why the roads in SM are congested. This also confirms why it is so very necessary to monitor the number of vehicles using the main highways in our area.

Damage to property:

As a result of the continued Grove Hill traffic issues it was considered appropriate to include factual information concerning property damaged by road vehicles along this road. During the past 3 years, 4 properties have been struck by vehicles, of these 3 of the drivers were caught before they drove off the other was a "hit and run" incident. Additionally, a number of vehicles parked legally in the parking bay outside the terrace homes have been damaged by "hit and run" vehicles. Grove Hill needs urgent and swift attention and action.

Stansted airport and vehicle parking:

Although Stansted airports expansion application UTT/18/0460/FUL has been refused, (24th Jan. 2020) at the time of writing this report the owners of the airport MAG has given notice that they are to Appeal the refusal. Passenger use in 2019 was 28MPPA, its approved capacity cap is 35MPPA. The airports Surface Access Transport

Assessment, 35+ Project document states, “The current (end of 2017) approximate number of spaces per car park are: - Long Stay 21,950; Mid-stay 5100; Short-stay 3700, total 30750. A question was put to the Stansted Airport Consultative Committee Meeting on 24th Oct. 2019 asking the number of vehicle parking bays to include staff and car rental and hotel and restaurants. A written reply states; Short-stay 7600, Mid-stay 5100, Long-stay 24000, Staff 3600, car rental village 500. The airport had difficulty providing hotel vehicle parking bay data but they reported approximately 170 bays at Hilton Hotel. Using Google Earth web site, the author of this report counted the number of vehicle parking bays at the Hampton by Hilton Hotel of 535 bays, Lodge Hotel 116 and Radisson 477 bays. The airport has announced that additional bays are expected to be constructed for public parking and possibly for other use to 55,000 bays. How much of this highway traffic travels uses Uttlesford roads is difficult to determine?

Air Quality:

The quality of the air we breathe is affected by the way we live including vehicles travelling on our highways.

Like all local authorities UDC has a responsibility to monitor air quality in its district and to publish Air Quality Annual Status Reports (ASR). The author of this report has referred to the reports published in July 2017 which refers to data collected during the 12 months of 2016 and 2018 for data collected during the year 2017. UDC provided the author with RAW monthly data from Stansted Mountfitchet Diffusion Tubes for the year 2019. It must be noted that this data has yet to be corrected by UDC. For guidance on the “correction” process reference should be made to UDC 2019 Air Quality Annual Status Report pages 23 and 24. These pages refer to, Appendix C: Supporting Technical Information/Air Quality Monitoring Data QA/QC. It also refers to Diffusion Tubes QA/QC, Diffusion Tubes Bias Adjustment Factors.

The locations of the diffusion tubes in Stansted Mountfitchet are shown in the table below together with their RAW NO₂ pollution results and their position relative to the kerb. The height and distance from the kerb were measured by the author of this report, these measurements differ from the measurements in the UDC published reports. The significance of these differences need to be investigated.

Close examination of these results with the growth of the number of vehicles and the introduction of “Ultra Low Emission Vehicles” on our highways has yet to be considered.

It has already been said that the types of vehicles on our roads is changing. The trend is away from diesel to petrol and then to Hybrid and Battery vehicles. This suggests that pollution generated by road traffic will reduce over time but the rate of change is not reported. Delivery vans and HGV’s seem to be exceptions they continue to be mainly diesel driven. Examination of Table VEH0132 titled Ultra Low Emission Vehicles (ULMV) licensed at the end of quarters from 2011 show that in England 2.16 million ULMV were licensed of which 37322 are in Essex with 3943 of them registered in Uttlesford. This is 5.7% of all vehicles registered in Uttlesford. Although this is a small proportion of all registered vehicles, this is an encouraging trend but has little influence on air quality bearing in mind the increasing number of larger vehicles on our roads.

Traffic data:

Other than the data for Grove Hill, the data below has been obtained from Essex CC/Highways reports. As already mentioned, a Freedom of Information request has been submitted to Essex CC for Grove Hill and Lower Street usage data. As at July 2020 the FoI information has not been provided by ECC.

The table below shows data recorded in the following documents: -

01-2012; Essex Highways, Church Road, Start date 11th Jan 2012.

05-2012; Essex Highways, Church Road, Start date 15th May 2012.

10-2013; Essex Highways, High Lane, Start date 18th Oct 2013.

11-2014; Ringway Jacobs, High Lane, Start date 18th Nov. 2014.

10-2016; Ringway Jacobs, Silver St, Chapel Hill and Lower St, Start date 11th Oct. 2016.

12-2017, Ringway Jacobs, Cambridge Road, 12 months to Dec 2017.

The data 12-2017 was obtained from a "Permanent Classified Count" machine on B1383 by Five Acres.

Street	Date of recorded data and showing the average daily volumes					
	01-2012	05-2012	10-2013	11-2014	10-2016	12-2017
Stansted Rd/Silver St					17344	
Pines Hill						
Chapel Hill					6813	
Church Rd	5122	6205			6685	
Grove Hill					4976 calculated by Ray Woodcock	
Lower St					7717	
High Lane			2407	2741		
Cambridge Rd – 5 Acres					10234	10019
Walson Way					2567	

So, what can be done to reduce these problems?

General;

The highways in and around Stansted Mountfitchet have hardly changed in the past 50+ years yet the traffic and the size and weight of the vehicles they carry has increased out of all recognition. The number of vehicles using our highways seem to be continually increasing and there is little to suggest this will not continue. With this in mind drastic actions are necessary. Essex Highways and Highways England need to have proposals before a catastrophe happens.

B1383 Pines Hill/Silver Street;

This is our busiest road. Very little can be done to reduce the consequences of the bottle-neck. Solutions are needed to reduce the amount of traffic on this road.

B1051 Chapel Hill;

If the Residents Parking area was removed this would improve traffic flow but these residents NEED parking facilities. This could be provided by using the unused car park opposite the road Woodfields and making a stepped access for the drivers from the car park to Chapel Hill, this proposal has been made to Essex CC who are believed to be the Landlord of this area but they continually report that it has plans for its use. This must be investigated? Another frequent proposal is to stop parking on Chapel Hill between Recreation Ground Road and the Fire Station with double yellow lines, also, it is necessary to install a “one-way” priority sign close to Woodfields allowing priority for traffic travelling down the hill in accordance with the Highway Code.

Church Road;

The issues along Church Road concern excess vehicles speed and the “build-outs” and pedestrian safety. The village Speed Watch team operates on the Church Road site by Churchfields. Many vehicles leaving the village are recorded travelling at 40+ mph. There are no speed restricting measures from the railway bridge to, just before Maitland Road other than 30MPH signs, the build-outs further along Church Road are not operating as the village Highways Committee had hoped, many vehicles risk collisions by ignoring the priority signs. It is suggested that Speed Controlling Cushions would be more effective. Church Road has an additional significant issue, many people including school children use the narrow pedestrian walkway and are particularly exposed to soakings in wet weather. This is caused by vehicles throwing up water caused by poor surface drainage as a result of blocked kerbside gullies. More frequent clearing of the gullies should be considered.

B1051 Lower Street;

Lower Street is the 3rd busiest road in the village, 7717 vehicles use it daily. It has kerbside parking on both sides which significantly reduces the effective width of the road resulting in frequent traffic jams. The traffic flow along it could be improved by reducing the width of the wide pedestrian walk-way on the west side. A detailed study by a SM Parish Councillor proposing a kerb-side layby which would enable the effective width of the carriage-way to be widened easing traffic flows, reducing pollution yet maintaining more than adequate width of the walk-way for pedestrians. This coupled with the currently under construction pedestrian crossing by the Social Club would make this road safer for village life. Essex Highways should consider these proposals and openly discuss their thinking with the active members of the community.

If more dwellings are approved for construction in neighbouring Elsenham and Henham congestion, air pollution and noise will become an even greater problem possibly resulting in the restaurants having to stop serving meals outside. See drawings and photos below.

B1051 Grove Hill/Elsenham Road;

Grove Hill needs urgent consideration. As a consequence of frequent issues along the lower part of GH Ray Gooding EC Councillor convened a meeting with SMPC and Essex Highways and residents on 7th February 2020 to try to find a resolution to the Grove Hill issues. A new “Layby” outside the terrace houses on the north side was suggested. This has been investigated by the author by talking with the terrace homes residents, all rejected the proposal. Additional signage has now been installed further from GH advising HGV drivers that it is Weight limited. This has been shown to be ineffective. Residents ask for roadside bollards to be installed on the north side to restrict vehicles of excess width from mounting the pedestrian walk-way, Essex Highways report this will contravene their policy due to the width of the pedestrian walkway, they are asked to review their policy bearing in mind the special issues which affect this area as a consequence of frequent traffic grid-lock air quality is poor and close to the WHO unacceptable level for NO₂.

B1351 High Lane;

No actions are required along High Lane.

B1383 Cambridge Road;

Is the second busiest road in the village carrying over 10,000 vehicles each weekday. Some of the traffic comes from SM but mostly from settlements north and south of us. From Chapel Hill to Hargrave Sports Ground there is kerbside and pedestrian walk-way parking particularly, between Chapel Hill and Clarence Road where people do their shopping. This reduces the effective width of the carriageway causing the bottleneck and delaying traffic in both directions. A SM Parish Councillor considered this issue in detail about 18 months ago proposing the pedestrian walk-way, where it is particularly wide, is narrowed creating a shopper only parking “Layby”.



The pedestrian walkway average width is 5.0 M, minimum 4.5 M.



The air quality receptor on Cambridge Road.



Traffic waiting to progress south along Cambridge Road.



Traffic queuing approaching Grove Hill traffic lights.

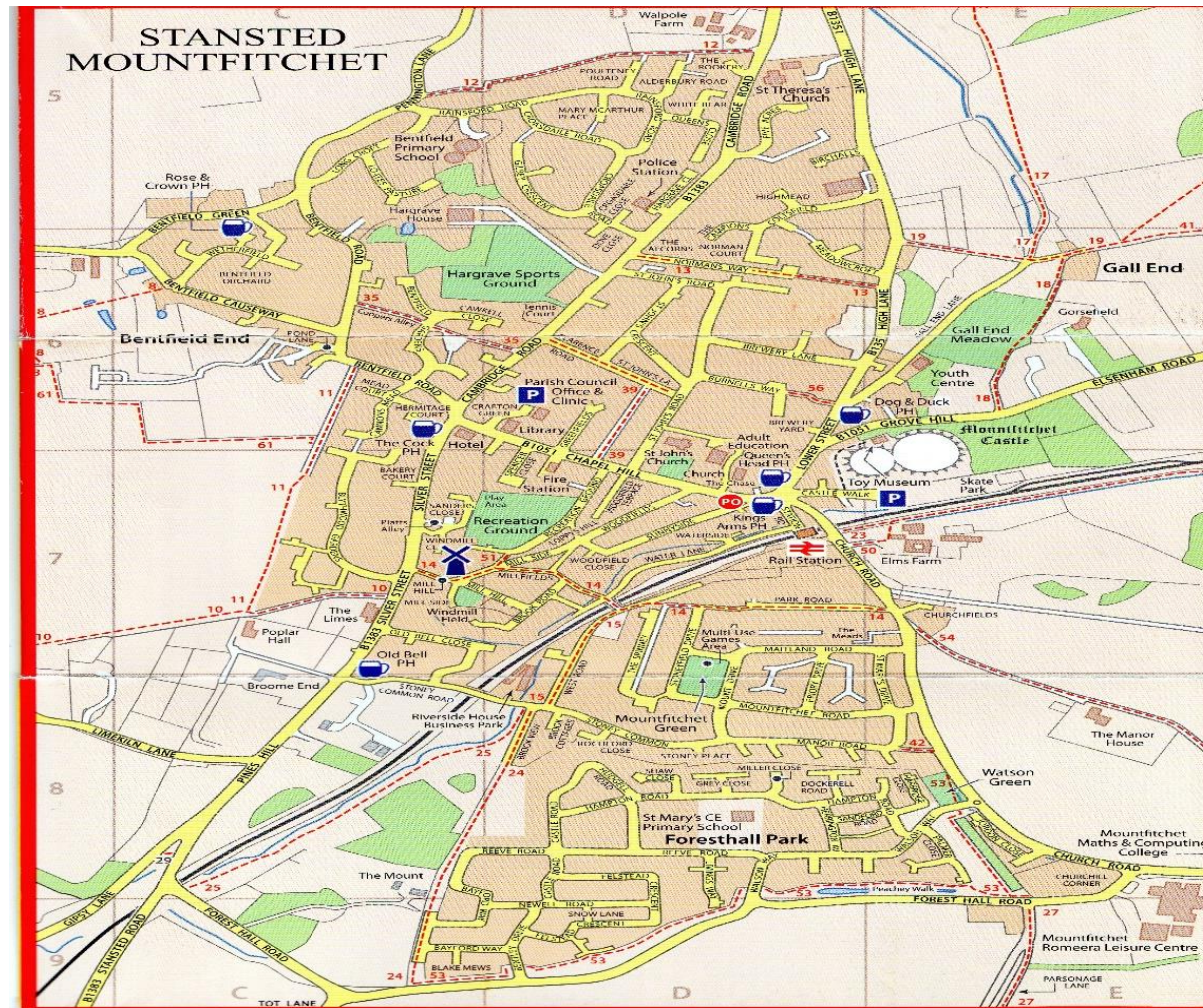


Chapel Hill



Grove Hill: a vehicle exceeding the weight limit and clearly far too wide.

Stansted Mountfitchet showing all highways in this report.





Lower street Pedestrian Walk-way.

By the Shoe Repaired its 4.12 M wide.

By the Tudor House its 4.01 M wide.

By 23-25 Lower street its 5.45M wide.

By 29 Lower Street its 4.54 M wide.



Cambridge road on pedestrian walk-way car parking, this is a daily happening and reduces the effective width for pedestrians to about 20%, insufficient for a double buggy.



Lower street flood February 2014.

Natural threats:

The Lower Street area of our village is an historic flood plain. Under Lower Street runs a culvert the whole of its length, it starts close to the Dog and Duck pub and ends close to the railway bridge. If the grille at the start of the culvert close to the pub is not regularly cleared of debris washed down Ugley Brook when it's in full flow following heavy and persistent rain and the kerbside gullies are not regularly cleaned, the roads from Gall End Lane to the junction of Lower Street and Chapel Hill will flood. When this occurs as shown in the photo above, Lower Street should be closed affecting all traffic leading to it including that from Elsenham and Henham. The Parish Councils Flood Action Team has met the Environment Agency on a number of occasions proposing and seeking a long-term solution to this highways problem. That voluntary Team also regularly clears the Grille.

Conclusions:

Our roads have hardly changed for well over 50 years yet there has been major increase in road traffic and the size of vehicles of all classes.

This report is intended to be thought provoking and hopefully a group of interested and constructive people including ECC Highways and SMPC will convene a series of meetings, including members of the community, to identify and prioritise what needs to be actioned and when, to overcome the issues in this report.

Lower Street and Cambridge Road pedestrian walk-ways are very wide. Can they be better used to improve shopper parking and traffic flows yet, above all, maintaining safe pedestrian walk-ways. It should be possible to reduce the width of these very wide pedestrian walk-ways by 1.5 to 2metres. This would provide better effective use of the very busy road, reducing congestion and pollution.

It is not possible for the author and contributors to this report to solve the issues, only ECC Highways can make the required changes but the community and Stansted Mountfitchet Parish Council and greater involvement of Uttlesford District Council can contribute with suggestions. Stansted Mountfitchet Parish Council has involved Essex CC and Essex Highways on a number of occasions by convening meetings but very little real progress has been made, an example; EC Cllr. Ray Gooding convened a meeting with Essex Highways and SMPC and a few residents on 7th February 2020 to try to find a resolution to the Grove Hill issues, a new “Layby” outside the terrace houses on the north side was suggested during the meeting, this has been investigated by those present by talking with grove Hill residents, all opposed the suggestion. Additional signage has been installed further away from Grove Hill advising HGV drivers that it is Weight limited. Residents ask for roadside bollards to be installed on the north side to restrict vehicles of excess width and to prevent further damage to private dwellings, Essex Highways report this will contravene their policy due to the width of the pedestrian walkway. This matter needs to be very carefully re-examined.

Air quality on our Highways is poor and this is expected to deteriorate until the number of Ultra Low Emission Vehicles, of all classes, significantly increases replacing diesel and petrol vehicles. Reference should be made to the Air Quality table above and in particular Grove Hill pollution April 2019, Grove Hill was closed to all traffic for 6 weeks enabling accident damage to a private dwelling to be repaired caused by an HVG. The air is polluted and is putting lives at risk. Many reports published by experts and the World Health Organisation confirms that polluted highways harms human **health** and is a killer.

Actions are needed to reduce the number of vehicles on our roads which are now operating to full capacity as shown in the table on page 5.

What other actions can be taken to improve traffic flows and/or reduce the number of vehicles on our roads? See above under, “So what can be done to reduce these problems?”

The frequent discussions within SM Parish Council highlight the issues and we preface most with the comment “Proposals need to be AFFORDABLE”. “They must be effective” “They must be possible”.

The constant building of dwellings in Stansted Mountfitchet and surrounding villages and in Bishops Stortford must stop until there are significant highways improvements. For each dwelling built 1.7 vehicles are added to our roads.

The Planning Appeal, Ref. APP/C1570/W/19/32433744 which refers to Planning Application UTT/17/3573/OP for the development of up to 350 dwellings on land to the north west of Henham Road must be contested.

ECC Highways must consider the wider consequences of building more dwellings than just their effects on M11 junction 8. Local roads further from developments MUST be independently evaluated and included in Planning Officers Reports.

Uttlesford District Council has a policy of confining Stansted airport activities, such as passenger car parking, to within the boundary of the airport, at this time this policy is not being enforced, an example is, airport passenger car parking in the Stansted Mountfitchet Kings Arms car park, this type of activity should stop. This will help reduce the number of vehicles entering and leaving the settlement.

Maybe the only real solution is to build a bypass but from where to where and what will be the consequence on our roads which accept the bypass traffic and what is the consequence in the longer-term and what is the cost? Is it affordable?

What I do know is, the issues related to Stansted Mountfitchet Highways cannot remain as they are the problems will increase as time progresses.

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Acknowledgements and references:

UK Governments DoT Vehicle Licensing Statistics.

Uttlesford District Council Air Quality Annual Status Reports.

ECC Highways usage reports.

Residents of Stansted Mountfitchet.

Elsenham and Henham Paris Councils.

Thanks to SM Parish Councillor John O'Brien who put lots of time into researching ways to improve traffic flows and writing a report which have been used in this report