Appendix 5: Transport Issues

1 Purpose

This Appendix presents an analysis of transport issues in the Parish, with particular focus on the impact of increased traffic volumes generated by recent housing development.

2 Traffic problems

2.1 It is clear from various ad hoc surveys of traffic flows that there has been a major, sustained increase in traffic volumes in the Parish. Based on automated traffic counts, daily weekday flows on key local roads are estimated as follows:

- Milford Mill Road (UC162902/UC152911): c5,700
- Church Road, Laverstock (C329): c8,800
- Ford Road/ Roman Road, Ford (C287): c2,400

(Traffic data for the Portway is not available)

Details of the traffic surveys are contained in the supporting evidence available on the Parish Neighbourhood Plan website at https://www.lfcnp.co.uk/. Milford Mill Road and Ford Road/Roman Road, which are still essentially narrow country lanes, have been transformed from quiet roads into heavily used "rat runs" - in the case of Milford Mill Road for most of the day, for Ford Road/Roman Road at peak times.

2.2 There has been a longstanding concern about transport issues among residents in the Parish. This was again manifested in the various community engagement exercises undertaken as part of the preparation of the parish Neighbourhood Plan. In a 2019 survey of local residents, the majority of respondents expressed concern about the volume of traffic on local roads, speeding traffic and dangerous or inconsiderate parking. All three of the roads mentioned above were regarded as "frequently a problem or almost always a problem" by more than half of all local respondents. The widespread incidence of speeding traffic has been confirmed by recent automated surveys; the problem is particularly acute on Ford Road/ Roman Road where more than half the vehicles surveyed in October 2020 within the village were exceeding the 30mph speed limit and 15 per cent were travelling at 40mph or above.

2.3 The increase in traffic volumes is a consequence of several factors:

2.3.1 Substantial and sustained housing development within the parish. This has almost trebled the number of dwellings over the past thirty years – from c1,250 in 1991 to c4,150 at the start of 2020. This increase has been almost entirely a consequence of the location of a succession of strategic housing developments in the parish to meet the housing needs of the wider Salisbury Housing Market Area, notably:

- Bishopdown Farm (1992-1998)
- Hampton Park (1993-2000)
- Pilgrims Way, Laverstock (2007-2011)
- Old Sarum (2008-2016)
- Riverdown Park /Hampton Park 2 (2015-2017)
- Longhedge (2018-).

It is estimated that in the past thirty years the number of cars available in the parish has quadrupled from c1,500 in 1991 to c6,000 in 2019; and is forecast to reach 6,400 by 2021 on completion of Longhedge (see Table 1 below).

Based on National Travel Survey data trip rates per person, it is estimated that, over the same period, daily car trips by households in the Parish have increased from 3,200 to c10,800 in 2019 and are forecast to exceed 11,500 by 2021 (see Table 2). This increase may well be an underestimate, as research studies using this data reveal that households moving into an area have significantly higher trip rates than established households. In the case of our Parish, differences in composition of incoming households would be expected to contribute to higher than average trip rates. Households moving to the Parish are larger than the national average and have a younger age profile than the national average, (more persons per household working, more children per household).

2.3.2 Changes in travel to work patterns. Based on an analysis of 2011 census data, members of households moving into the area tend to work outside the Salisbury/ Laverstock area. They would be expected to use the primary routes in the parish to reach these work destinations.

2.3.3 Increased traffic congestion in Salisbury. The absence of a bypass and regular congestion on the inner ring road and the approaches to the centre of Salisbury have led to vehicle drivers (from both outside and within the Parish) using these four primary routes to avoid delays, especially at morning and evening peak times.

2.3.4 Expansion of schools within the parish. Three secondary schools (serving the wider Salisbury area) and one local primary school are located very close together along Church Road Laverstock. To help meet the educational needs of the increased numbers of children in new housing developments in and around the Parish, these schools have been progressively enlarged to the point that c2,000 pupils now attend these schools, with up to half arriving and departing by car. This has contributed to serious problems of traffic congestion, dangerous parking and air pollution. In addition, parents from outside the normal catchment area have been encouraged to send their children to primary schools within the parish in order to utilise existing capacity, again leading to a further increase in car journeys.

2.3.5 Late delivery of infrastructure in new developments. A good example was the lack of a pedestrian/cycle link between Longhedge and Old Sarum until late 2020 resulting in private cars or taxis being used to take children from Longhedge to the primary school in Old Sarum.

3 Limitations of existing local bus services and cycle routes

Attractive local bus services and a safe and easy to use network of cycle ways and footpaths have a key role to play in:

- providing easy access to places of employment, education and other local facilities, including (but not restricted to) those in the centre of Salisbury
- reducing traffic congestion and vehicle emissions by encouraging households with cars to reduce car usage
- improving accessibility for those local residents who do not have a car (according to the 2011 Census, c11% of all households in the Parish did not have a car/van available – see Table 3).

The limitations of the existing bus priority measures and of the cycle and footpath network in the Parish do not provide much encouragement for car users to switch modes. For example:

- physical constraints and cost mean that, as yet, there is no bus priority lane on London Road used by the Park and Ride service from Bishopdown Farm/Hampton Park
- there is no dedicated cycle route from Old Sarum/Longhedge to the city
- the cycle route from Old Sarum/Longhedge to the Laverstock schools along Green Lane is poorly surfaced in places and has dangerous crossings at the Portway and Ford Road.

4 Assessment of highways impact of housing development

In line with standard practice, each of the four major housing developments within the Parish was subject to evaluation of the impact on the existing road system by the local Highways authority (WCC/WC) and national Highways Agency respectively. The focus of these assessments was largely limited to the impact of the specific development on primary routes in the immediate vicinity eg the A30 and A36 for Riverdown Park and the A345 and A303 for Longhedge village. No consideration was given to the impact on traffic levels in the parish as a whole or on the cumulative impact of the developments.

5 Local traffic mitigation measures

Local measures introduced to address traffic problems within the Parish have been limited to the following:

Milford Mill Road:

- traffic lights at either end, in order to reduce the risk of accidents at carriageway constrictions
- 7.5 tonne vehicle weight restriction

Church Road:

- traffic calming measures (speed humps) mainly along the stretch fronted by the schools
- cycle lanes on either side of the carriageway, but these are often blocked by parked cars at school start/finish times

Ford Road/Roman Road:

- traffic calming measures (build-outs each end of the residential area with priority given to vehicles exiting this area) and improved signage

Pearce Way:

- traffic calming measures (raised sections at junctions and width restrictions).

6 Salisbury transport strategy

Any fundamental long term solution to the traffic problems experienced by residents in the Parish is inextricably linked to finding a solution for Salisbury as a whole. The 2018 Salisbury Draft Refresh Transport Strategy (whose geographical scope included the parish) is the most recent attempt to do so.

Within a set of recommended measures costing £31m, the elements most directly relevant to the parish are:

- Improved connectivity between Longhedge/ Hampton Park and the city in the form of a cycle route (£1.1m) and high speed bus route
- Capacity enhancements for inner ring road roundabouts at Castle Road, St Marks Church and Wiltshire College plus Bourne Way roundabout on A36 Southampton Road (£1.72m)
- Upgraded P&R strategy - parking charges (increasing the differential between the cost of using city centre parking compared with P&R), high quality interchange at P&R sites inc. public toilets and marketing to maximise use of P&R sites including Beehive Old Sarum and Petersfinger Southampton Road (£0.5m).

However, the resulting overall impact of these measures on vehicle traffic volumes and journey times is modest and is likely to have little impact on rat running through the Parish. Indeed, it was acknowledged in the report that, even with full implementation of the recommendations, the individual junctions on the A36 Southampton Road (College roundabout, Bourne Way roundabout and Petersfinger Park and Ride junction) would remain an issue.

7 Local Plan Transport Review January 2021

In January 2021, as part of the review of the Local Plan, Wiltshire Council published a Local Plan Transport Review, undertaken by Atkins. This review included:

- forecasts of traffic flows on the local highway network over the plan period to 2036, based on the proposed Local Plan housing site allocations for Salisbury, including a site in the Parish north east of Old Sarum
- proposed measures designed to address potential capacity problems
- the impact of these mitigation measures on traffic flows.

Atkins' assessment of the impact of the proposed Local Plan housing growth for Salisbury is that traffic volumes would increase on all key local roads. The proposed mitigation measures to the north of the city are limited to:

- the provision of cycle lanes on four routes, but on only two of these (Castle Road and London Road) would the lanes be segregated
- high frequency buses and bus priority measures on the Park & Ride routes to/ from Old Sarum/Longhedge and Bishopdown Farm/Hampton Park.

Not surprisingly, even with the proposed measures, traffic volumes in the morning peak period (8-9 am) are forecast to have potentially severe impacts (defined as a volume/capacity ratio of 85% or over) on the following key roads:

- Ford Road (forecast to be at 100% of capacity)
- Castle Road (100% of capacity)
- the "rat run" between the A36 (St Mark's Roundabout) and Milford Mill Bridge (85-100% of capacity).

It should also be emphasised that these forecasts of traffic flows are based on the same pattern of destinations used in the Salisbury Strategic Transport Model, which was last updated in 2018. Specifically, no allowance has been made for the implications of capacity issues at local secondary schools. As mentioned earlier, land to the north east of Old Sarum (SHELAA S80) is one of three preferred green field housing expansion sites. The supporting evidence suggests that there would be secondary school capacity at Sarum Academy but the reality is that students from this site would probably displace out of area students in the Laverstock schools or go to the city's grammar schools, potentially leading to a further increase in traffic volumes on Ford Road and Castle Road.

8 Summary and conclusions

Successive strategic housing developments in the parish to meet the needs of the wider Salisbury area have led to a major and continuing increase in traffic volumes within the Parish. These problems are exacerbated by the congestion on the inner ring road and its approach roads, which encourages rat running on roads through the parish. Local measures to address these issues have been largely limited to traffic calming measures.

The Salisbury Transport Strategy (yet to be implemented) only partially addresses these problems and those measures directly relevant to the parish have yet to be implemented. In the absence of the strategy implementation, the location of any more sites in the parish to meet future strategic housing allocation requirements would therefore be particularly problematic. However, if any such sites were to be identified, it is imperative that:

- the assessment of any proposal should include the impact on traffic volumes in the Parish and specifically address the minor through routes in addition to the major ones
- approval should be conditional on infrastructure investment and associated measures (including improvements to bus services, cycle and pedestrian routes) and the necessary funding to minimise the traffic impact on the Parish.

Table 1 Car availability 1991-2021 projection: Parish

	Households	Cars available per household	Cars available
1991	1202	1.2	1494
2001	2075	1.5	3052
2011	2484	1.5	3719
2019 est	4049	1.5	6062
2021 projection	4307	1.5	6448

Notes
Data for 1991-2011: source Govt Censuses

Data for 2019, 2021:Parish Council estimates based on housing completions since 2011 and cars available per household, 2011

Table 2 Car trips 1991-2021 projection: Parish

	Car trips per person per year	Population in households	Total car trips per year	Total car trips per day
1991	385	3009	1158471	3174
2001	438	5213	2283382	6256
2011	392	6184	2423971	6641
2019 est	380	10359	3936335	10784
2021 projection	380	11146	4235296	11604

Notes

Car trips per person per year: source National Travel Survey - average for England

1991-2019:source National Travel Survey - average for England

2021 projection assumes no change from 2019 car trips per person per year

Table 3 Numbers of cars/vans available to households, 2011

Cars/vans available to household	Parish No of Households	Parish Per cent of households	Wiltshire Per cent of households	England Per cent of households
None	267	10.8	14.8	25.8
1	1037	41.7	41.4	42.2
2+	1180	47.5	43.9	32.0
Total	2484	100.0	100.0	100.0

Source: 2011 Census