

ABERDEEN CITY COUNCIL

COMMITTEE	Communities, Housing and Infrastructure
DATE	24 January 2017
DIRECTOR	Pete Leonard
TITLE OF REPORT	Reduction in speed limit from 50mph to 40mph on the A944 / A944 Lang Stracht / B9119 Skene Road / C89C Kingswells Bypass – Stage 3 (Public Advertisement)
REPORT NUMBER	CHI/16/026
CHECKLIST COMPLETED	Yes/No

1. PURPOSE OF REPORT

This report deals with two traffic orders at the final statutory stage: -

1. The Aberdeen City Council (A944 / B9119, Aberdeen) (40MPH Speed Limit) Order 201(X)
2. The Aberdeen City Council (C89C, Aberdeen) (40MPH Speed Limit) Order 201(X)

At the meeting of this Committee on 19 May 2015 officers were instructed to commence the necessary legal procedure/statutory consultation to reduce the speed limit from 50mph to 40mph on certain lengths of the A944, A944 Lang Stracht, B9119 Skene Road and the C89C Kingswells Bypass, but only to report the outcome of this process after traffic signal controls were installed and in operation at the junction of the B9119 Skene Road with the access road serving Aberdeen Crematorium.

The main statutory advertisement period took place from 16 September to 7 October 2015. The public/press notices are attached (Appendix 1), from which members will be able to see the exact content of the proposals. Also attached are plans (Appendix 2) indicating the extent of the proposals. While copies of the eight objections received as a result of the consultation are available to view in Appendix 3. There is in addition a series of observations in Appendix 4 with respect to the objections.

2. RECOMMENDATION(S)

It is recommended this Committee overrules the objections for the reasons given in this report and instructs officers to make the traffic orders as originally envisaged.

3. FINANCIAL IMPLICATIONS

The implementation cost with respect to the “The Aberdeen City Council (A944 / B9119, Aberdeen) (40MPH Speed Limit) Order 201(X)” will be in the region of £1500, with an on-going maintenance cost of approximately £1300 every 10 years. The proposed implementation cost would be met through the annual budget allocated for road signage.

There are no implementation costs associated with “The Aberdeen City Council (C89C, Aberdeen) (40MPH Speed Limit) Order 201(X)” as this has been met by the developer. The future maintenance cost is negligible, as this proposal involved repositioning signs that already existed and the only real addition is that of a few repeater signs that would cost in the region of £60 to replace on a 10 year cycle.

4. OTHER IMPLICATIONS

There is a risk, if funding is insufficient, that any approved traffic regulation orders may have to re-enter the legislative process if they are unable to be implemented within the statutory implementation time of 2 years from the start of public consultation.

BACKGROUND/MAIN ISSUES

- 4.1 At the meeting of the Communities, Housing and Infrastructure Committee on 19 May 2015, it was proposed the current 50mph speed limit on those roads that function as main corridors from Kingswells to the city centre should be reduced to 40 mph. The lengths of road concerned comprise three specific sections: -

- A944 between the Kingswells roundabout junction and the Lang Stracht / Skene Road roundabout junction (commonly referred to as the “switchback roundabout”).
- A944 Lang Stracht from the ‘switchback’ roundabout to the point of the 30mph speed limit west of its junction with Skye Road.
- Skene Road from the ‘switchback’ roundabout to the point of the 30mph speed limit located west of its junction with Groats Road.

A plan in Appendix 2 highlights those lengths of road specified above.

- 4.2 The reasons given for the proposed reduction was as follows: -

“Following the implementation of the 40MPH speed limit on A944/B9119 between Prime Four Development and the City Boundary at Westhill it was proposed to reassess the speed limits to the east in light of the Countesswells and Den of Maidencraig developments which are due to commence shortly.

It is proposed to extend the 40MPH into Aberdeen to meet the existing 30MPH speed limit on the A944 Lang Stracht and B9119 Skene Road / Queen’s Road. This will rationalise the speed limit, removing driver confusion and will provide a safer environment for the forthcoming junctions to the new developments. The reduced speed limit will also be required to support the installation of signal controls at the B9119 Skene Road junction with Aberdeen Crematorium.”

- 4.3 The committee on considering this proposal instructed officers to commence with the legal process / statutory consultation, but only to report the outcome of this process after traffic signal controls were installed / operating at the junction of the B9119 Skene Road with the access road serving Aberdeen Crematorium.
- 4.4 Accordingly, the purpose of this report is to advise this committee of the objections received as a result of the statutory consultation and to highlight survey data collected with regard to vehicular speeds since the signals at the Skene Road / Aberdeen Crematorium junction came into operation.

Background

- 4.5 For background, when considering the dual carriageway section of the A944, between its junctions with the Kingswells Roundabout and Westhill, the speed limit was reduced to 40mph for this length’s entirety in February 2015. This reduction took into account the new A944/B9119 signal controlled junction that replaced the roundabout that previously managed traffic at this junction and also future development on the road, particularly the Aberdeen Western Peripheral Route (AWPR) interchange.
- 4.6 Speed surveys were carried out on a section of the dual carriageway, at a point approximately 230m west of the junction with Brodiach Road, during four working days in August / September 2016. The collated data indicated the average speed for both westbound and eastbound traffic is 43 mph.
- 4.7 This length of the A944 is classed as a principle distributor road and suburban in type (while it still retains some rural qualities, it nonetheless connects suburban communities and serves adjacent development). When considering this type of route the document titled

“Setting Local Speed Limits – Guidance for Local Authorities”, a circular published in 2006 by the Scottish Government (at that time the Scottish Executive) indicates a 40mph speed limit is generally suitable for higher quality suburban roads or those on the outskirts of urban areas where there is little development.

- 4.8 The same guidance does go on to indicate that in exceptional circumstances, a 50mph speed limit could be considered for a high quality dual carriageway roads with little or no development. When considering this length of the A944 it is not considered to meet that criterion. It is relatively modest in distance (approx. 1.7 miles), has three significant junctions currently, with the additional AWPR interchange expected to open in late 2017. It also has a number of side roads and accesses which are served by gaps in the central reservation to allow vehicles to turn right from/to these roads/accesses. Also running adjacent to the road is a popular cycle track, where if the road was still subject to a 50mph speed limit it would not be possible to meet the current design guidance of a 1.5m separation strip between the cycle track and carriageway.
- 4.9 Taking the above factors into account, the 40mph speed limit that has been introduced on this length of road is appropriate and the recent surveys where the average speed is highlighted as 43mph indicates drivers are generally conforming to the mandatory speed limit. It is also relevant to highlight the 85 percentile speed is 48mph for both directions – this is the speed at which 85% of the total volume of traffic recorded was travelling at or below. The expectation for the future is this difference between the average and 85 percentile speeds will reduce with the introduction of the AWPR interchange and further development on this road.

A944 Lang Stracht from the ‘switchback’ roundabout to the point of the 30mph speed limit west of its junction with Skye Road.

- 4.10 As indicated at the outset of this report, it is necessary to consider the roads where it is proposed to reduce the speed limit to 40mph in three distinct sections. Accordingly the rationale for the proposal on the length of the A944 Lang Stracht from the ‘switchback’ roundabout to the point of the 30mph speed limit, west of its junction with Skye Road, will first be detailed.
- 4.11 This length of road (approx. 0.7 miles) is single carriageway and divided into two lanes for westbound and eastbound traffic; running adjacent or nearby are shared pedestrian/cycle tracks. There are three junctions on this length of road; they serve: -
- (i) Dobbies Garden Centre and properties beyond;
 - (ii) the ‘Old’ Lang Stracht (this junction functions as a bus gate);
 - (iii) the inset road that runs parallel to a section of the main road.

There is also a minor access associated with an adjacent property.

- 4.12 A survey to measure the speed of vehicles on this length of road was carried out during October 2016 over a period of five days. The radar device was located at point approximately midway between the junction with the access to Dobbies Garden Centre and the 'Old' Lang Stracht junction. The collated data indicated the average speed for westbound and eastbound traffic on a working day was 41mph and 37mph respectively; while at the weekend the average speeds were 42mph and 41mph respectively.

- 4.13 This road is classed as a suburban distributor road, and again when considering current guidance, the road would now be deemed more suitable for a mandatory speed limit of 40mph. For reference, the guidance states: -

"Mean speeds should be used to determine local speed limits. This reflects what the majority of drivers perceive as an appropriate speed to be driven for the road."

"Roads suitable for 40 mph are generally higher quality suburban roads or those on the outskirts of urban areas where there is little development. They should have good width and layout; have parking and waiting restrictions in operation; and buildings set back from the road. These roads should, wherever possible, cater for the needs of non-motorised road users through segregation of road space. Alternatively, Traffic Authorities should consider whether there are convenient alternative routes available and ensure that any roads with a 40 mph limit have adequate footways and crossing places as necessary for pedestrians, cyclists and horse riders."

- 4.14 Beyond this length of road already fulfilling the guidelines that would support the introduction of a 40mph speed limit, it's worthy also to consider the future introduction of traffic signal controls at the junction with the access to Dobbie's Garden Centre. The aforementioned being a condition of planning consent to allow for future phases of the 'Maidencraig' housing development that will be served by this access. This continuing housing development will further add to the volume of traffic using this length of road and thereby emphasises its status as a suburban distributor route.

Skene Road from the 'switchback' roundabout to the point of the 30mph speed limit located west of Groats Road.

- 4.15 This length of road (approx. 0.8 miles), like that previous, is single carriageway and divided into two lanes for eastbound and westbound traffic; running adjacent, on its north side, is a shared pedestrian/cycle track, albeit on the length that passes the Den of Maidencraig Reserve, the track is behind a dyke on the periphery of the reserve, with a footway running parallel to the road instead. The most significant

junction is that with the access road that serves Aberdeen Crematorium. There is however three further junctions with roads that serve adjacent properties and likewise a single access that gives direct access to a residential property.

- 4.16 A survey to measure the speed of vehicles on this length of road was carried out during November 2016 over a period of five days. The radar device was located at a point approximately 150 metres west of its junction with Aberdeen Crematorium. The collated data indicated the average speed for westbound and eastbound traffic on a working day was 39mph and 40mph respectively; while at the weekend the average speeds were 42mph and 41mph respectively.
- 4.17 As with the length of the A944 Lang Stracht previously described, this length of the B9119 Skene Road, under current guidance, would be considered as a suburban distributor road and would be deemed suitable for a 40mph speed limit.

A944 between the Kingswells roundabout and the “switchback” roundabout.

- 4.18 This length of road (approx. 0.6 miles) is a dual carriageway with two lanes each for westbound and eastbound traffic. Towards its eastern end on the approach to the switchback roundabout, there is a shared pedestrian/cycle track on its northern side for a distance of approximately 230 metres. It has two junctions with access roads serving properties on its south side and also an access to fields on the south side; associated with the aforementioned are gaps in the central reservation that allow vehicles to access/egress by way of a right turn.
- 4.19 For clarity there are certain lengths of this road already subject to a 40mph speed limit. On its westbound approach to the Kingswells Roundabout, the speed limit changes from 50mph to 40mph at a point approximately 250 metres from the roundabout. Likewise on the eastbound exit from the roundabout the speed limit changes from 40mph to 50mph at a point approximately 130 metres east of the roundabout.
- 4.20 A speed survey was not carried out on this length of the A944 as it's evident that during periods outwith the peak commuter hours, vehicles will be reaching a peak average speed in the region of 50mph; that is to say on entering this road from the respective roundabouts (or via the Skene Road “switchback” bypass lane) vehicles will generally accelerate to the region of 50mph, but this speed will only be held for a brief period before the vehicle is decelerating on the approach to the next roundabout junction. In contrast, during peak commuter hours, the average speed will drop due to the sheer volume of vehicles and queuing that occurs at these roundabout junctions.

- 4.21 Guidance states the following with regard to 50mph speed limits on suburban roads: -

“In exceptional circumstances a 50 mph limit may also be used on higher quality roads where there is little or no roadside development, and this can be done safely. The roads most suited to these higher urban limits are those such as primary distributors with segregated junctions and pedestrian facilities. They are usually dual carriageway ring or radial routes or bypasses which have become partially built-up. Traffic Authorities should, however, always assess the potential impact on the local community and non-motorised road users before considering such a limit.”

- 4.22 The question therefore arises whether this section of road fully complies with those exceptional circumstances above, and even if it does, whether the short distance where a potential speed of 50mph could be reached is appropriate in the context of the adjoining lengths of road where there is already a 40mph speed limit or where it is recommended in the context of this report.

- 4.23 When considering the quality of this road, it can be argued that it does not meet the high quality suggested by the guidance. The factors that limit the quality are:

- the separation strip associated with the shared pedestrian/cycle track is below the 1.5 metres recommended for a 50mph speed limit. While eastbound motor vehicles in the traffic lane adjacent to the pedestrian/cycle track will largely be decelerating on the approach to the ‘switchback’ roundabout, the aforementioned separation strip is still a desirable minimum.
- in terms of modern roads design, if constructing a new dual carriageway with a speed limit at or above 50mph, a vehicle restraint barrier on the central reservation would be installed that would prevent a vehicle from entering the opposing carriageway in the event of a loss of control.
- while not uncommon on many existing dual carriageways nationwide, the gaps in the central reservation that allow vehicles to turn right from/to private accesses are not ideal where a 50mph speed limit is in place.

- 4.24 The lengths of this road which are currently subject to a 50mph speed limit are 750 metres for westbound traffic lanes and 870 metres for eastbound lanes. With regard to guidance the minimum length of a speed limit should generally not be less than 600 metres. Accordingly the lengths concerned are not much beyond the recommended minimum.

- 4.25 This combination of a length of road that is not quite meeting the quality expected for a 50mph speed limit and the relatively short lengths where this speed limit applies, leads to a situation where it would be recommended the speed limit is reduced to 40mph. This would provide for a consistent 40mph speed limit between Westhill, Aberdeenshire, and the points on the Skene Road and the Lang Stracht where the speed limits reduce to 30mph.
- 4.26 As highlighted earlier in this report, mean speeds should be used to determine local speed limits. Accordingly, it would be necessary to monitor a 40mph speed limit on this length of dual carriageway to ensure drivers are largely complying with the limit. Albeit, with consistent signing, and drivers being clear the speed limit is not deviating, there would be confidence that mean speeds would adjust to the region of 40mph.
- 4.27 Looking to the future, the 'switchback' junction will be redesigned to accommodate a road that serves the housing development at Countesswells. This development has the potential to provide in the region of 3000 homes over a number of years and the associated traffic will add considerably to the volume of traffic that uses this junction and the adjoining A944 / A944 Lang Stracht / B9119 Skene Road. A 40mph speed limit will thereby provide for a driving environment that is both consistent and safe in the context of these roads being classed as higher quality suburban distributor roads.

The Aberdeen City Council (C89C, Aberdeen) (40MPH Speed Limit) Order 201(X)

- 4.28 On the C89C 'Kingswells Bypass' it is proposed to extend the 40mph speed limit 410 meters northwards. The rationale behind the proposed extension was as follows: -

"In order to support the implementation of the new access off the C89C Kingswells to Newhill road for the Prime Four development an extension to the existing 40 mph speed limit requires to be implemented. This will require the existing 40 mph speed limit to be extended approximately 410 metres northwards."

- 4.29 As highlighted, the new junction serves further development within the Prime Four Business Park and is controlled by way of traffic signals. The extension to the speed limit is modest and affords drivers with more time to react to the signal controlled junction thereby enhancing road safety.

For information this extension to the 40mph speed limit has already been implemented on the ground; it was implemented by way of a temporary Traffic Order and was deemed necessary as the traffic signal controls came into operation in the period since the advertisement for a permanent order.

Conclusion

- 4.30 The current criteria on setting speed limits indicate it's appropriate the 50mph speed limit on the lengths on the A944 Lang Stracht and B9119 Skene Road should be reduced to 40mph. Thereafter the remaining section of the A944 dual carriageway subject to 50mph does not meet the high quality that would be expected in terms of modern roads design. This factor, in combination with its very modest length, supports a reduction in the speed limit to 40mph and will provide for a consistent limit between Westhill and the point of the existing 30mph speed limits on the Lang Stracht and Skene Road.
- 4.31 In addition, the proposed extension of the 40mph speed limit on the C89C 'Kingswells Bypass' is modest in length and affords drivers with more time to react to the new signal controlled junction serving the Prime Four Business Park.
- 4.32 It is therefore recommended this Committee overrules the objections received in relation to both "The Aberdeen City Council (A944 / B9119, Aberdeen) (40MPH Speed Limit) Order 201(X)" and "The Aberdeen City Council (C89C, Aberdeen) (40MPH Speed Limit) Order 201(X)" and instructs officers to make these orders as originally envisaged.

5. IMPACT

Improving Customer Experience – As the recommendation is to approve the proposals, there will be a positive impact on current customer experience by providing a safer environment for all road users.

Improving Staff Experience – Not applicable.

Improving our use of Resources – Not applicable.

Corporate – The contents of this report link to the Community Plan vision of creating a "sustainable City with an integrated transport system that is accessible to all". With respect to the delivery of the Smarter Mobility aims of Aberdeen – *The Smarter City*: "We will develop, maintain and promote road, rail, ferry and air links from the city to the UK and the rest of the world. We will encourage cycling and walking", and "We will provide and promote a sustainable transport system, including cycling, which reduces our carbon emissions." These proposals are also in line with the Council's Transportation Strategy to improve safety for all road users by continuing to reduce the number of casualties in traffic collisions.

Public – This report will be of interest to the residents/proprietors/businesses within the proposal area and also to road users from outside the immediate area.

6. MANAGEMENT OF RISK

Where recommendations are not accepted with regard to these proposals there is the risk road safety levels and traffic management could be compromised thereby resulting in on-going public concern, negative media reporting, and reputational damage. Conversely, proposals with regard to traffic management measures can often prove contentious and it is therefore possible these proposals could be subject to negative feedback/comments. In this respect, concerned parties would be provided with a thorough rationale as to the necessity for the proposed reduction to the speed limits.

7. BACKGROUND PAPERS

[‘Various Small Scale Traffic Management and Development Associated Proposals \(New Works\)’, Communities, Housing & Infrastructure, 19 May 2015](#)

[‘Setting Local Speed Limits; Guidance for Local Authorities: ETLLD Circular 1/2006’, Scottish Executive, 15 August 2006](#)

8. REPORT AUTHOR DETAILS

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APPENDIX 1

ABERDEEN CITY COUNCIL

ROAD TRAFFIC REGULATION ACT 1984

THE ABERDEEN CITY COUNCIL (A944 / B9119, ABERDEEN) (40MPH SPEED LIMIT) ORDER 201(X)

Aberdeen City Council proposes to make "The Aberdeen City Council (A944 / B9119, Aberdeen) (40mph Speed Limit) Order 201(X)" in terms of its powers under the Road Traffic Regulation Act 1984. The effect of the order will be to impose certain lengths of 40mph speed limit on the A944 (Skene Road/Lang Stracht) and the B9119 (Skene Road), Aberdeen, as defined in the schedule below. For consolidation/administrative purpose, the length of the A944 defined in the schedule below includes existing sections of the A944 already subject to a 40mph speed limit.

Full details of this proposal are to be found in the draft order, which, together with a map showing the intended measures and an accompanying statement of the Council's reasons for promoting them, may be examined during normal office hours on weekdays between 16 September and 7 October, 2015, in the offices of the roads officials in the Communities, Housing and Infrastructure department at Marischal College, Aberdeen.

It is recommended that anyone visiting Marischal College to view any of the documents should make an appointment to do so, in order that a member of staff can be present to offer an explanation if necessary. Anyone unable to visit Marischal College can telephone (01224 522307) to speak to one of the officials.

Anyone wishing to object to the proposed order should send details of the grounds for objection during the statutory objection period, which also runs from 16 September to 7 October, 2015, including their name and address, to:

Traffic Management, Communities, Housing & Infrastructure, Business Hub 11, 2nd Floor West, Marischal College, Aberdeen, AB10 1AB (or alternatively by e-mail to trafficmanagement@aberdeencity.gov.uk)

Any person who submits an objection to a road traffic order should be aware that any objection made will be available to members of the Committee, available for inspection by members of the public, distributed to the press, and will form part of the agenda pack which is available on the Council's website. To that extent, however, they are redacted, with e-mail addresses, telephone numbers and signatures removed from this correspondence.

Schedule

A944 (Skene Road / Lang Stracht)

From Bishopdams Bridge, eastwards to a point 357 metres or thereby west of its junction with Skye Road.

B9119 (Skene Road)

From a point at 163 metres or thereby west of Groats Road, westwards to its junction with the A944.

ABERDEEN CITY COUNCIL

ROAD TRAFFIC REGULATION ACT 1984

THE ABERDEEN CITY COUNCIL (C89C, ABERDEEN) (40MPH SPEED LIMIT) ORDER 201(X)

Aberdeen City Council proposes to make "The Aberdeen City Council (C89C, Aberdeen) (40mph Speed Limit) Order 201(X)" in terms of its powers under the Road Traffic Regulation Act 1984. The effect of the order will be to impose a certain length of 40mph speed limit on the C89C, Aberdeen (Kingswells to Newhills Route), as defined in the schedule below. The length defined in the schedule includes an existing section of this road already subject to 40mph and this proposal effectively extends this speed limit 410 metres northwards to take into account the introduction of a new junction serving the Prime Four Business Park.

Full details of this proposal are to be found in the draft order, which, together with a map showing the intended measures and an accompanying statement of the Council's reasons for promoting them, may be examined during normal office hours on weekdays between 16 September and 7 October, 2015, in the offices of the roads officials in the Communities, Housing and Infrastructure department at Marischal College, Aberdeen.

It is recommended that anyone visiting Marischal College to view any of the documents should make an appointment to do so, in order that a member of staff can be present to offer an explanation if necessary. Anyone unable to visit Marischal College can telephone (01224 522307) to speak to one of the officials.

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2nd Floor West, Marischal College, Aberdeen, AB10 1AB (or alternatively by e-mail to trafficmanagement@aberdeencity.gov.uk)**

Any person who submits an objection to a road traffic order should be aware that any objection made will be available to members of the Committee, available for inspection by members of the public, distributed to the press, and will form part of the agenda pack which is available on the Council's website. To that extent, however, they are redacted, with e-mail addresses, telephone numbers and signatures removed from this correspondence.

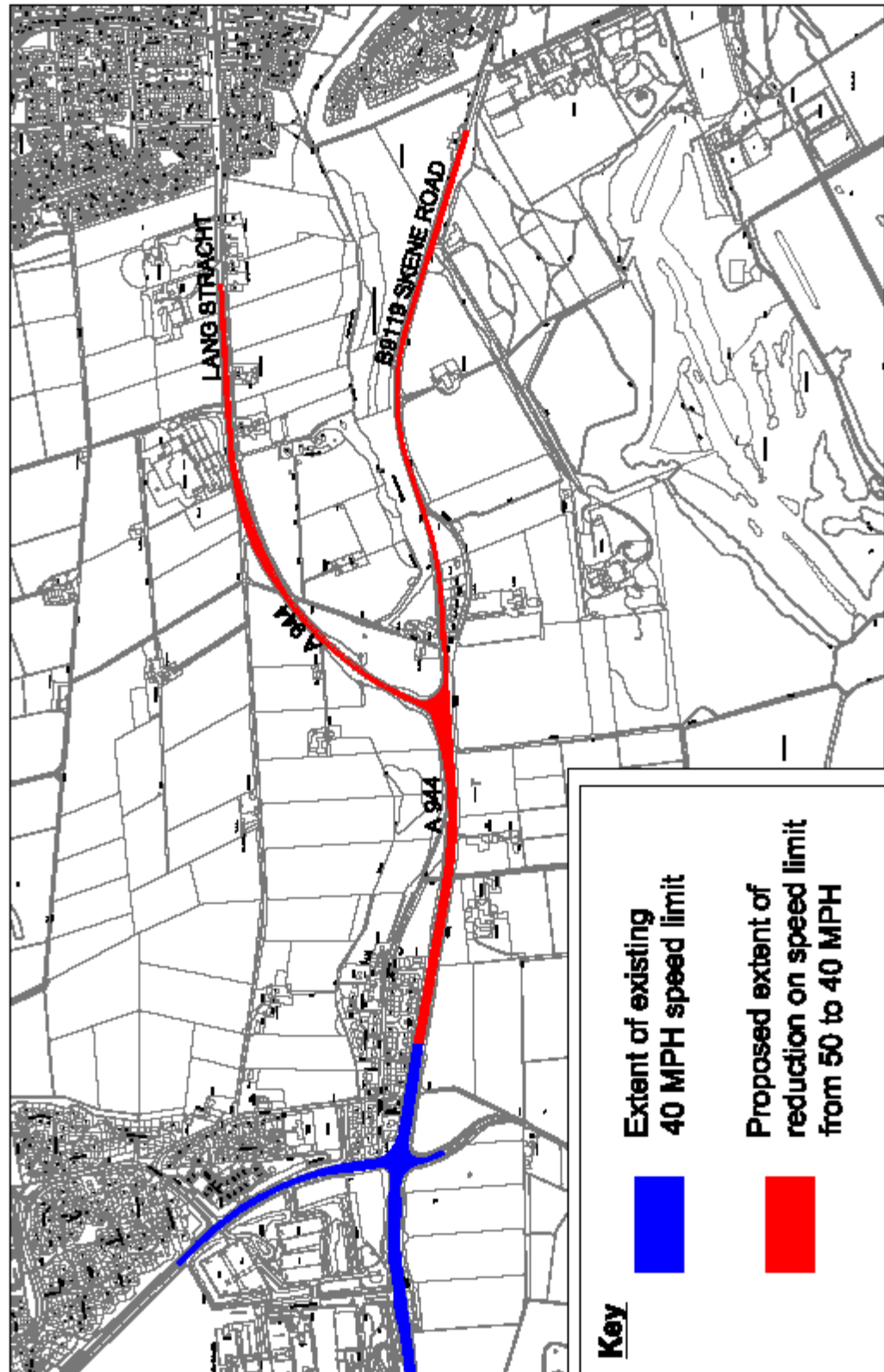
SCHEDULE

C89C

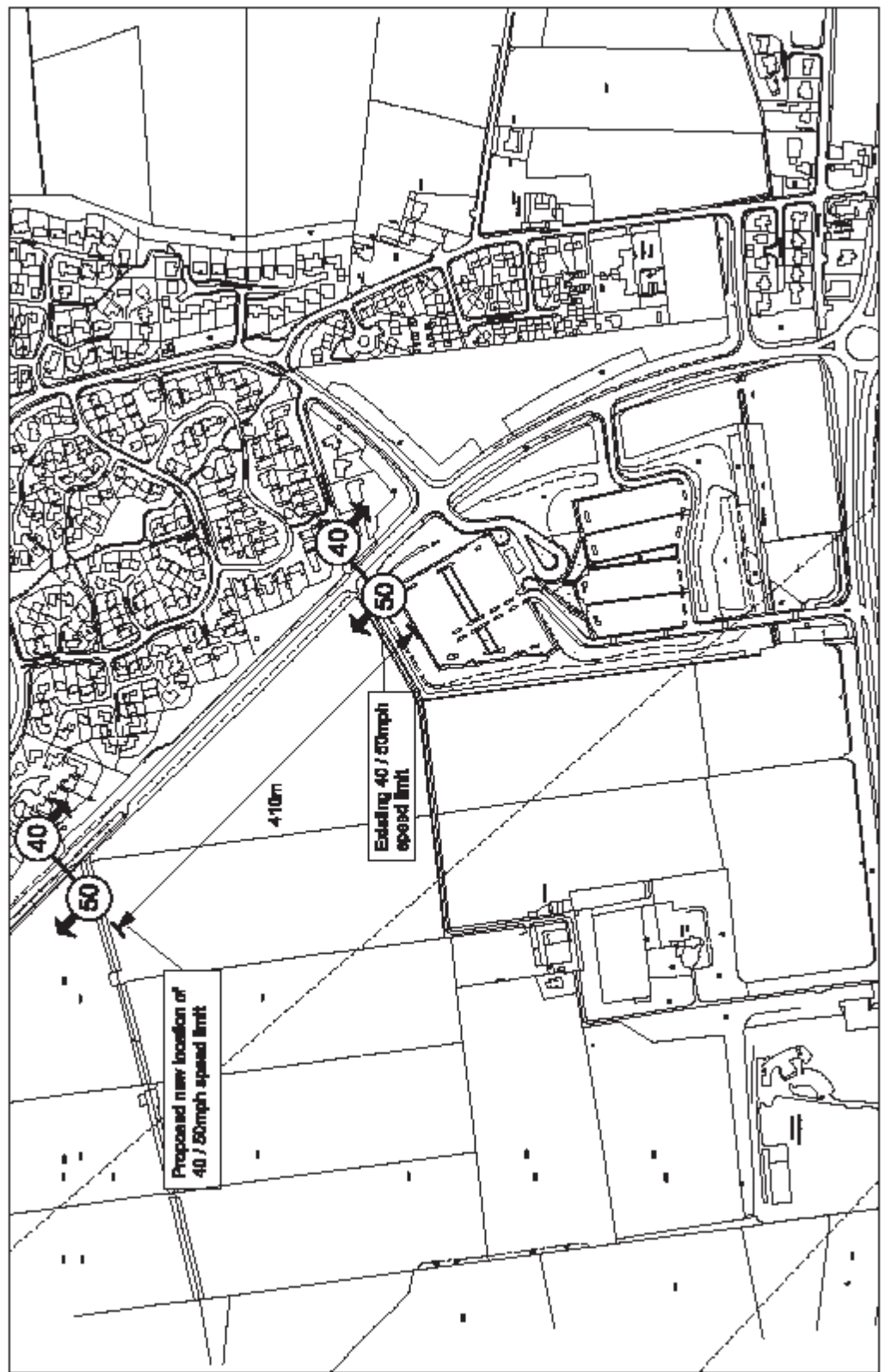
From it junction with the A944, northwards for a distance of 934 metres or thereby.

Appendix 2

A944 / Skene Road / Lang Stracht - Proposed 40 MPH Speed Limit



C89c Prime Four: Proposed extension to existing 40 mph speed limit



Appendix 3

[REDACTED]

[REDACTED]

Proposal to reduce the speed limit on the A944 and surrounding roads

Kingswells Community Council would like the following points to be considered regarding the proposal to reduce the speed limit on the A944 and surrounding roads

When we discussed the road system around Kingswells a few years ago with ACC Roads Department we were advised that they were considering closing off the central reservation openings. Local residents and businesses who require to access the opposite carriageway will have to do so by travelling along the A944 to the next roundabout. This will be an inconvenience to people who have to perform this manoeuvre, and the reduction of speed from 50 to 40mph will exacerbate the situation.

The A944 was reported to be one road that would carry more traffic after the introduction of the Western Peripheral Route. It is also key to the distribution of the increased traffic from various developments in the area. The traffic assessment for these developments was carried out on the basis of the speed on the A944 being 50mph. Reducing the speed to 40mph makes the road network less efficient.

The A944 is not perceived to be different from other roads in terms of road safety and we question the need for the reduction in speed limit approaching roundabouts and traffic controlled junctions when this is not required as a National Standard.

We have requested information on road safety and recent accidents from ACC Roads Department, without success. We suspect that although there have been fatalities on the A944 that speed was not a primary reason for these.

We feel that the proposed changes have been made in haste and that road improvements in the area would benefit from a more in depth assessment. The study should consider road safety and the various methods by which it can be improved without impacting on the effectiveness of the road network. No more changes should be implemented until a full review has taken place.

We consider the existing speed limit of 50 mph to be more appropriate than the proposed 40mph.

Comparison with other roads in Aberdeen

The A944 is a dual carriageway which has had its speed limit reduced over recent years to 50 mph. It is now proposed to reduce the limit to 40mph. The A944 is the western gateway to the City Centre. The road starts at the City boundary with Westhill and is in open countryside for a distance of 3 miles before reaching the first main settlement of Kingswells. The road continues past Kingswells as a dual carriageway to the Greenhedges roundabout where the road continues as single carriageway to Sheddocksley and Hazelhead. The proposal is to make the speed limit 40mph on this 5 mile route

The Parkway is a single carriageway main arterial route through Aberdeen with a speed limit of 50mph. It has several roundabouts and signalised pedestrian crossings.

Access from the south is by the A90 dual carriageway with speed at national speed limit. The speed limit is reduced to 40mph a short distance from the Bridge of Dee. Safety on this road was increased by the closure of central reservation openings.

Access from A96, the Inverness road, is by dual carriageway at national speed limit. The speed approaching the airport roundabout is 70mph. Speed is reduced to 40mph prior to the next roundabout where the road approaches Bucksburn.

We conclude from this comparison that a 50mph speed limit on the A944 offers a greater level of safety than other access roads to the city and it is not necessary to reduce speed to 40mph to accommodate normal road features like roundabouts and traffic lights. Where reduction in speed is required it should be introduced local to the area of concern.

The Consequence of Recent Change

The introduction of the traffic lights at Westhill has improved access onto the A944 from side roads by breaking the flow of traffic. It is now easier to join the A944 at the end of a wave of traffic. This change is welcomed.

Recent reductions in the speed limit on the A944 have caused driver frustration and may lead to increased accidents on the road. The following behaviours are being demonstrated, and we consider the root cause is the recent reduction in speed:

- Increased bunching of traffic and driving in convoys is more dangerous than driving in naturally flowing traffic. This will be more dangerous in poor weather conditions when stopping distances are increased.
- Under-taking – this is a dangerous manoeuvre resulting from driver frustration
- Pulling out into traffic – a 40 mph limit gives a driver a false impression that he has more time to complete manoeuvres. Driving at 50 mph would reduce the need to pull out, and is fast enough to ensure that these manoeuvres are performed with more care and attention.
- The approach to the City from Banchory is by a single carriageway road at 50mph. There are few overtaking opportunities on the 12 mile road and driver frustration can be high. At the new signalised junction at Westhill the road joins the A944 dual carriageway. Prior to the reduction in speed limit this road allowed overtaking and consequently reduced driver frustration. This benefit has now been lost with the introduction of the 40mph limit, and the speed reduction adds to driver frustration and increases the propensity of accidents.
- Cars travelling at 40mph are not economical in terms of fuel consumption and have a greater impact on the environment than a car travelling at 50mph.

Justification for the reduction in speed limit

We understand that some of the reasons put forward for the need to reduce the speed include the introduction of new developments and driver confusion. These points are discussed below.

Impact on New Development

The new developments along the A944 corridor include:

- Countesswells will be accessed via a signalised junction at Greenhedges and, subject to planning application, from the Kingswells roundabout. The roundabout is currently signal controlled at peak times, and has high level traffic lights if these are required out with peak times. The roundabout and the new junction are a significant distance from the housing development and does not pose any safety issues to the residents. Conversely, with 3,000 new homes the residents will require a better road network which will be achieved more easily with a 50mph speed limit rather than the 40mph proposed.
- The Maidencraig development is adjacent to the Lang Stracht, and we agree that the speed from the Greenhedges roundabout should be reduced to 40mph, but we think the timing of this change should be much later when house building has commenced and drivers can clearly identify the reason for the change. Making arbitrary changes to the road network with no clear reason for the change can cause driver frustration and increases the propensity for accidents.
- Changes to the junction at the crematorium include the proposal for a reduction in speed limit. We agree that a signalised junction maybe required when there are cremations, but these controls should be part time with sensor type controls to activate the lights. Out with crematorium business hours the lights should be turned off. The Parkway has several signalised pedestrian crossings on a road with a 50mph speed limit, and the need for a 40mph limit at the crematorium is questioned.
- New Access to Prime 4 on the C89C: There is a proposal to reduce the speed limit to 40mph approaching the new signalised junction on the C89C. This junction will have significant impact on the flow of traffic at peak times. Limiting the speed will cause more traffic problems which will have to be addressed if the proposals are approved. As demonstrated elsewhere in this document there are traffic controlled pedestrian crossings in Aberdeen on roads with 50mph speed limits. These are more hazardous than a signalised junction. Consequently, the need for the speed reduction is questioned. The true cost of introducing the reduction in speed limits is much more than that identified in the consultation documentation, and details of how congestion will be mitigated should be included in this proposal.
- Prime 4 has a signal controlled access off the A944. The gantry style traffic signals provide an additional level of safety. The access is close to the Kingswells roundabout and is served by slip roads and dedicated turning lanes. These measures are sufficient and the need for a 40 mph speed limit is questioned.

Driver Confusion

The confusion drivers are experiencing due to different speed limits in the area has been created by the introduction of the 40mph limits. Prior to that the norm was 50mph and there was no confusion. It is clear that in other areas within the city approaching roundabouts and pedestrian crossings at 50mph is acceptable, and the 'double standard' is causing confusion and frustration in drivers.

The signage is also confusing. Speed limit signs come in two sizes. The use of larger signs would reduce driver confusion.

The Way Forward

The road system in the area is congested at peak times, and there is little that can be done to resolve these issues at this time. Developments in the area will introduce new signal controlled junctions and additional roundabouts which naturally control the speed of traffic. The last thing road users need is for the system to be micro managed. The road system was not dangerous when the speed limits were 50mph, but the proposed reductions will increase driver frustration and the probability for an increase in the number of accidents.

Aberdeen City Council should make the roads safer by closing the gaps in the central reservation, if this is still the intention of the Roads Department. Road safety can also be increased by the introduction of safety barriers on the central reservation. A reduction in speed limit at this time will increase journey times and will have an impact on businesses and personal lives of road users. This is a measure that can be used in the future when other measures become ineffective. It is inappropriate at this time.

Kingswells Community Council request that the current proposals are turned down and approval is given instead to assess the road network in this area. The assessment should propose a full set of road improvement measures that will be introduced in a phased manner. The area may well have significant road issues, but changes that are considered seriously in a mini master plan can be introduced, if required, with minimal frustration to drivers. The current proposals do not achieve this objective.

The proposals are not small scale road improvements. They will have significant impact, and should be considered in a more detailed study. Please refuse approval and approve the study.

[REDACTED]

From: Colin Macdonald [REDACTED]
Sent: 04 October 2015 11:07
To: TrafficManagement
Subject: OBJECTION The Aberdeen City Council (C89C, Aberdeen) (40mph speed limit) Order 201(X)

Follow Up Flag: Follow up
Flag Status: Completed

I wish to object to the completely unnecessary proposal to reduce the speed limit on the A944 and B9119 as promoted in this order. I am unable to find any proper justification put forward for this proposal.

The design and layout of the roads is more than adequate for the existing speed limit.
Consistency with the speed limit at the roundabout and traffic lights at Kingswells is not an adequate reason.
Consideration of the roadworks ongoing for the junction with the AWPR is one thing relative to a reduced speed limit but there is no such reasoning for reducing the speed limit here.
Crawling along bumper-to-bumper in a two-lane squadron at 40mph on a road designed for 70mph speeds, causing driver frustration and resentment, does absolutely nothing for road safety. It may be justifiable where there are roadworks, even if only for a short stretch of the road, but to equalise the speed limit here with an area where there are roadworks makes no sense.
It is insulting to motorists to proceed on the basis that they are unable to cope with changes in speed limits: the 40mph reductions were originally introduced at roundabouts and traffic lights where drivers should be slowing down anyway.

Colin Macdonald
Clais-na-Creig
Torphins

[REDACTED]

From: karen lawrie [REDACTED]
Sent: 25 September 2015 13:56
To: TrafficManagement
Subject: A944 speed reduction

Follow Up Flag: Follow up
Flag Status: Completed

Hi. I have lived in Westhill for 30 years and cant believe the shambles the council have made of the dual carriageway structure. The accidents there are caused by people crossing the carriageway from the various junctions on to it. Its not rocket science to close the centre reservation exits and force people to the Tesco or Kingswells roundabouts to make there exits safer. Its a short distance to travel and it would be less stressful for drivers. Even at 40mph as it is just now u still get people cutting out in front of u causing a knock on effect from drivers breaking suddenly. You can have a bad accident at 40mph too if someone behind u is not concentrating on the car in front. Whats going to happen once the WPR opens - your going to have frustrated drivers thats what. They will also be forced to drop there speed from one dual carriageway to the next. As far as pedestrians go there isnt any apart from one guy who crosses to get his paper from the petrol station. Are u going to make thousands suffer because he wont get his paper delivered. I think its about time the council took a closer look at the way this road is used and use the road for what it was built for. 60mph is safe if the roundabouts are forced into use.

Sent from my Samsung device

[REDACTED]

From: KATHY STRACHAN [REDACTED]
Sent: 28 September 2015 08:32
To: TrafficManagement
Subject: Objection to proposed speed reduction Kingswells

Follow Up Flag: Follow up
Flag Status: Completed

Hi

I am writing to object to the proposals to lower the speed limits to 40 from Kingswells into Aberdeen. This is a retrograde move that will not improve road safety instead will cause a degree of frustration and added risk to people's journey.

It is closely linked to the unpopular move to reduce the speed on the dual carriageway to Westhill. Virtually no-one knew this was happening and so were not able to complain - the feedback and the petition since that happened shows how unwelcome and unnecessary that move was. Trying to push this reduction through on the back of that mistake is equally damaging. Granted the section where there is construction could have a 40 for the duration but even that seems unnecessary since it is not crossing the road.

This move is not in keeping with limits on other roads as we are told - the roads round Kingswells to Newhills is 50 then 60, as is the road to Forrit brae and the road from dual to Garlogie so it is evident that the reduction to 40 on the dual or the single carriageway sections is not in keeping with these.

It seems that this is a continuation of the crusade by individual councilors who are not listening to the concerns of those they represent. Most people feel less safe on the dual now - since the speeders still speed, the normal drives are now being made to be unlawful if they sit at the entirely appropriate speed of at least 50 and the amount of undertaking is considerable. I would expect this frustration to spill over to these roads if the reduction was enforced. Enforcing these limits should also take place to stop the real speeders from hurting someone. Forcing normal drivers to take a lower speed DOES NOT stop the speeders - I see them daily.

I would ask that you do not continue with this plan and put steps in place to reverse the previous decision on the dual carriageway.

I would also like to point out how difficult it is to find out these public consultations are in place. Another reason the response came after the reduction last time. I was told notices were posted on the lamp posts along the route - and drivers can just stop on a dual carriageway to read them? I was also told that they are not put on the council website - which seems the obvious place. I found out that obvious to the public is not the case to the council.

Please confirm receipt.

Kathy Strachan

■

01/10/15 (by email)

Dear Sirs,

A944 /Skene Road / Queens Road / Lang Stracht – Proposed 40 MPH Speed Limit

"Following the implementation of the 40MPH speed limit on A944/ B9119 between Prime Four Development and the City Boundary at Westhill it was proposed to reassess the speed limits to the east, in light of the Combeswellk and Den of Maldenroig developments which are due to commence shortly. It is proposed to extend the 40MPH into Aberdeen to meet the existing 30MPH speed limit on the A944 Lang Stracht, and B9119 Skene Road / Queen's Road. This will rationalise the speed limit, removing driver confusion and will provide a safer environment for the forthcoming junctions to the new developments. The reduced speed limit will also be required to support the installation of signal controls at the B9119 Skene Road junction with Aberdeen Grammarium."

With regard to the proposed reduction in speed limit west of Queens Road on the B9119 and A944 I would like to lodge an objection. My reasons for objecting are cited below however in summary the proposed speed limit is both unrealistic and unjustified, neither does it follow the Scottish Government Guidance on setting speed limits or the Department of Transport circulars on the same subject and I would argue that due process has not been followed regarding public access to evidence supporting the proposal.

As I understand it the speed limit on stretches of road outwith cities or towns is generally 60mph for single carriageways or 70mph for dual carriageways unless the design of the road introduces specific hazards or historical data indicates a reduction would be beneficial and Scottish Government publication ISBN 0 7559 1401 X sets out guidance on setting local speed limits.

One of the key points from the introduction to this document reads as follows *"Speed limits should be evidence led, self-explaining, and seek to reinforce people's assessment of what is a safe speed to travel. They should encourage self-compliance and not be seen by drivers as being a target speed at which to drive in all circumstances"*

I note from Aberdeen Council's online material that there is no specific supporting data or evidence available to the public concerning the proposed reductions and to the contrary, a previous report (reference EPI/13/114 by the Enterprise Planning and Infrastructure Committee) assessed part of the very same road and based on the Scottish Government guidance criteria concluded that "no further action should be taken with regard to implementation of a lower speed limit".

One point stated as a reason for the latest proposal is a proposition of continuity with existing sections of 40mph dual carriageway Westward towards Westhill. I also would also propose that the council review their previous assessment or decisions with regard to this as it could be contested the very basis is flawed and incorrectly assessed in terms of the guidance available.

Somehow or other, with little supporting evidence or pre-assessment criteria, the permanent reduction to a 40mph limit of adjoining sections of the A944 was adopted recently. This led, upon implementation,

to outrage amongst road users culminating in a petition of around 2000 being submitted to the local authority. As I understand it, the objectors were then pacified by a statement from the Local Authority to the effect that, for the duration of the AWPR works it would be more cost effective to implement a permanent 40 mph limit rather than repeated temporary 6 monthly ones during the work after which it will be re-assessed. Although a department spokesman indicated people had now quietly accepted the new limits, I can assure you this is very much a hot top of conversation amongst local residents and users of the road

For the continuity aspect, another point worth noting is contained within report reference EPI/13/114 as assessment criteria at that time included reference to the guidelines and "paying particular attention to roadside development element of the assessment criteria". The words "roadside development" however are only applicable in the Scottish Government guidance in relation to urban developments, which this area is not.

As such, I believe the 'inappropriate speed' mentioned in that report regarding the Prime Four development assessment is, in itself, inappropriate as this is a situation where the Scottish Government "rural" model fits best. This is also confirmed by Enterprise Planning and Infrastructure committee report reference EPI/13/083 assessing the immediate adjoining area and roads in a report using "Review of Rural Speed Limits" in its title.

Additionally, a helpful Technical Officer within the Traffic Management Communities, Housing and Infrastructure department took time to explain that proposals are based on projections of future developments, which may or may not actually happen and increase traffic, given the current local economic downturn. Unfortunately, the same chap was unable to guide me towards any hard or fast assessment criteria actually used to instigate or support any requirement for the A944 reduced limits.

Under the more appropriate rural model, the A944 heading west from Hazlehead would be 30mph until after the school (which it is), 60mph on the link road to the A944 dual carriageway (currently 50mph with proposed reduction to 40mph), then 70 mph (currently 50 mph with proposed reduction to 40 mph). From the start of the dual carriageway all the way out to Westhill a 50 – 70 mph speed limit is more appropriate and fits most Government guidelines.

No further regulation would be required with clearly signposted roundabouts and junctions naturally slowing the flow of traffic.

The proposed reduced speed may also have other adverse effects on safety:

- Impede the flow of traffic on routes used by emergency services attending incidents west of the city from ARI or centralised police and fire services as this is the main fast access route for that direction.
- Introduce additional roadside furniture and other hazards through a multitude of signs and their poles, which kill or injure vehicle occupants in event of an accident.

- Confusion through the over use of signage. The sheer variety and quantity of those already installed in approaches to the Kingswells roundabout on the A944 is caused by over-regulation and can serve to confuse drivers.
- As an example of over-signage, when traveling either to or from the city on the Hazlehead road there is signage on the now 50mph section of single carriageway warning of pedestrians crossing in 100 yards in both directions. In 30 years of travelling this road at various times of day and night I have yet to witness a single person crossing within $\frac{1}{4}$ mile of the point indicated. (It might be idea to review the decision making process that led to these signs being erected).

Another known adverse effects of over regulation and which I myself have observed, is the sharp increase in the number of drivers who have removed the dimension of speed from driving and now play safe with their licences. They drive at a constant 40mph on all roads regardless of conditions or limits. This leads to frustration in other road users on good 60mph roads, but also adds danger in towns or around schools where they also do not vary speeds according to the hazards.

This last point is a personal opinion, but as a Westhill resident I have travelled this particular road countless times at all times of day and night, either driving a variety of vehicle types or being a passenger in taxi or public transport over the past 30 years. I would suggest that the current legal limit is already inappropriately low for the existing design of road and any further reductions are unnecessary. The natural flow and speed of the main dualled sections of the A944 (outwith congested periods which self-regulate the speed of traffic to below the legal limit anyway) is at least 20 mph more than set currently. I should also add that outwith the peak times I have often been driven in taxis and public transport at around the natural speed and never felt unsafe.

For background, I am not a civil engineer, but my own work involves design of sometimes complex systems within the boundaries of guidelines, best practise reports or statutory and regulatory standards. Each project design is therefore based on hard and fast data, risk assessed with any decisions or outcomes logged as evidence to afford others the opportunity to scrutinise the design criteria or review the basis. I have also driven for business and pleasure extensively throughout the UK and Europe in a variety of vehicle types and far from being a young tearaway or boy racer, possess over 35 years' driving experience.

I also like to make, as the police call it, good progress, in any journeys undertaken, but fully support reductions in speed on urban roads, especially around schools, in areas of high pedestrian traffic or where other hazards are anticipated. However I am opposed to over regulation of road network because of some of the negative consequences.

In my opinion over regulation is very much the norm in the Grampian region and anyone who drives extensively in Scotland will observe the local speed limits are inconsistent with many other Scottish areas. As road design is relatively universal and similar hazards exist or can be assessed in known ways, this discrepancy has to be down to interpretation of these rules as correct application of the Scottish Government guidelines quoted previously should lead to consistency across all regions.

I have never before put pen to paper regarding local issues but this latest proposal has driven me to object. It is my opinion that our local authority's track record is far from great with vast amounts of public funds expended upgrading road infrastructure (many going from single to dual carriageway) yet over regulation of the new roads resulting in lower speeds and longer transit times. Furthermore, any reduced legal limits are then seen by developers as a chance to propose roadside developments which ultimately lead to concrete corridors. This ends up land locking new roads, effectively limiting future expansion options; not a sustainable ongoing situation because as time goes on the volume of traffic on most roads is only going to increase unless government policy changes.

I would be grateful if you could acknowledge receipt of this objection and advise me of the means by which it will be formally considered by your Members.

Yours Faithfully

The signature and address are redacted with black boxes.

Name and address supplied, but not for unauthorised publication without prior consent.

[REDACTED]

From: Kenny Philip [REDACTED]
Sent: 21 September 2015 18:46
To: TrafficManagement
Subject: Objection A944/B9119 REDUCTION OF SPEED LIMIT Order 201 (x)

Follow Up Flag: Follow up
Flag Status: Completed

I hereby wish to object to the proposed speed limit reduction from 50mph to 40mph , on the stretch of road currently 50mph , there is no historical accident rate for this particular road , in fact it is self regulated in that at busy times the speed is reduced to 20-30mph/to a standstill due to high levels of traffic , at all other times the traffic flows at an acceptable speed , I know this as I live right on the route and have done for the last 15years , the only serious accident tragically occurred during the 30mph limit imposed during the construction of the larger Kingswells roundabout. Most especially I object to the 40mph limit on the dual carriageway , this road was engineered for 70mph with no gaps or junctions , it is ironic that the safest roads are restricted, then on nearby single carriage way with nasty bends the limit increases to 60mph, the petition handed to the council had over 2000 signatures objecting to the 40mph limit on the dual carriageway to Westhill , in principal I do not mind 40mph on single carriageway roads through built up areas , but not on open roads designed for higher speeds. I have driven for 36 years in that time I have had no speeding charges , I fear this will end soon as I find myself speeding almost all the time on the A944 dual section usually around 55mph , I have lost respect for the council and their agenda when it comes to setting speed limits , 40mph on a straight dual carriage way is ridiculous, prosecuted for just 44mph is unacceptable. I challenge the council to produce the accident statistics that support this proposed change or is this move just guess work from those who don't actually drive this road on a regular basis. Lastly remember this, hundreds of thousands of cars travel on these roads over the years and almost all manage to do so without crashing, do not punish everyone to target the very few.

Ps . I have tried to drive at 40mph along the A944 to Westhill but find myself staring at my speedo rather than looking where I am going , this might explain the sharp increase in minor tail end accidents, along with people so bored at such a slow speed they spend time on the phone as I have witnessed in many occasions recently. Just to be clear I am satisfied with the 50mph limit it works well based on the accident levels on this road , but there has to be a common sense approach, I get the feeling the council are happy to ignore public opinion and are targeting the average driver to increase revenue and punish perfectly safe driving habits.

Please send me an acknowledgement this has been received and will be put to the council.

Regards

Kenny

[REDACTED]

Tel: [REDACTED]
Fax: [REDACTED]
Email: [REDACTED]
Web: [REDACTED]

[REDACTED]

From: David Montgomery Fox [REDACTED]
Sent: 06 October 2015 19:37
To: TrafficManagement
Subject: The Aberdeen City Council (A944 / B9119, Aberdeen) (40mph Speed Limit) Order 201(X)

Follow Up Flag: Follow up
Flag Status: Completed

Sir,

With respect to the above order we wish to object to this as follows:

It appears that the 40 mph reduction is a continuation of what was deemed necessary for safety reasons for the Prime Four and AWPR developments. The extension of this proposed 40 mph limit into the Lang Stracht and B9119 Skene Road into Hazlehead does not have any bearing on safety as these areas are not urban per se but rural areas (as per Scottish Government guidelines) and is also classed as such under your own committee reports - EPI/13/083.

We have not seen any safety data (or otherwise) which would provide conclusive support for this change.

We respectfully request that the committee re-reads its own reports on speed and traffic management (EPI/13/083 and EPI13/114 but to name two).

Regards,

David and Abbie Montgomery-Fox
[REDACTED]

[REDACTED]

From: Philip [REDACTED]
Sent: 24 September 2015 14:15
To: TrafficManagement
Subject: Objection to (A944 / B9119, ABLRDLLN) speed limit change

Follow Up Flag: Follow up
Flag Status: Completed

Good afternoon,

I object to the speed limit change of the (A944 / B9119, ABERDEEN) as I believe that the 50mph limit already on that road is more than safe enough. Rather than reducing the speed limits the central reservations should be closed off and traffic should be forced to go around the round-a-bouts at either end. It is a dual carriage way and there is absolutely no need for the speed limit to be reduced, if anything it should be increased. The Kingswells to Westhill section of the road has already been reduced to 40mph and in my honest opinion it has made the road **more** dangerous as nobody drives along it at 40mph and I dont blame them, its a ridiculous speed to be travelling along a dual carriage way outwith the town center. accidents are more likely to happen with people crossing over the central reservation and being struck by on coming traffic with a speed limit reduction as the people crossing will potentially think they have more time than they do due to people going over the 40mph limit. Im not condoning this behavior but it happens. The most ridiculous thing is that I can turn off onto one of the back roads along that stretch and drive 20mph faster than I can on the dual carriage way!

As i said at the start of the email, close off the central reservation crossing points, if your not going to raise the limit then leave it at 50mph and raise the Kingswells to Westhill section back to 50mph.

Regards,
Philip Banks

[REDACTED]

Appendix 4

Observations with respect to objections received

- Reference is made to other roads within the City where there are sections that have 50mph or above. Examples cited are sections of the A90 Parkway, A90 on the approach prior to the 40mph at the Bridge of Dee, and the A96 on its approach to Dyce. Thereafter it is suggested in comparison that a 50mph speed limit on the A944 offers a greater level of safety than other access roads to the city and it is not necessary to reduce speed to 40mph to accommodate normal road features like roundabouts and traffic lights.

All the roads highlighted above as examples are Trunk Roads and currently under the jurisdiction of the Scottish Government / Transport Scotland. It is for Transport Scotland to assess these roads and decide as to the appropriate speed limits. The lengths of the A944 / A944 Lang Stracht / B9119 Skene Road where it is proposed the speed limit should be reduced to 40mph have been assessed with reference to the Scottish Executive document 'Setting Local Speed Limits; Guidance for Local Authorities: ETLLD Circular 1/2006'. This indicates the lengths of those roads concerned, in a suburban context, are not of a quality that supports a speed limit of 50mph.

It must be stressed the speed limit on these roads is not simply being reduced to accommodate normal road features like roundabouts and traffic lights. It is instead the function and quality of these roads that is the primary concern. In this regard, the new junctions, or changes to those existing, further emphasise these roads as being suburban in nature by way of serving significant adjacent development and linking large communities that are separated by little distance.

With regard to the sections of Trunk Road mentioned, it is of note when considering the A96 on its approach to Dyce, the 40mph speed limit has been extended significantly westwards to beyond the new signal controlled roundabout associated with access to Dyce and the Aberdeen Western Peripheral Route (AWPR). Likewise, the City Council will review speed limits on lengths of road, such as the Parkway, when they lose their Trunk Road status as a result of the AWPR coming into operation.

The aforementioned highlights that each road must be judged on its own merits in terms of function and quality. Thus, while a greater speed limit may be observed on other roads, that same speed limit may not equally apply to another road simply because they share a similar attribute. For example, one of the objectors cites the difference in speed limit there will be between the dual carriageway of the AWPR and that of the A944; but these roads are significantly different, with the AWPR being a strategic trunk road (approximately 29 miles in length

when including the fast-link) that provides access to the road network that serves the City. In this regard it has no direct roadside development and has been designed with the necessary safety measures that allow vehicles to travel at higher speed, for example vehicular restraint systems and passive road furniture. In contrast, as specified in this report, the lengths of A944 dual carriageway are modest in length and act as a suburban distributor road. Thereafter its quality in terms of guidance on setting local speed limits is indicative that a 40mph speed limit would be appropriate.

- Some objectors make the assertion the roads concerned should be classed as rural in type and therefore have a speed limit applied in accordance with the guidance given for such roads. To reiterate, however, in terms of this current review these roads would be classed as suburban distributor type. They may still retain some rural qualities, but this has been diminishing for some years as the communities of Westhill and Kingswells have expanded, and similarly as a result of nearby development such as the Prime Four Business Park. The emphasis to the shift in suburban function will only be further strengthened by future development that is either underway or in the planning process.
- When regard to rural roads, some objectors highlight how they can exit the A944 dual carriageway which is currently subject to 40mph and can be driving on an adjacent rural road subject to the National Speed Limit/60mph. In this regard it is necessary to consider the context of how the National Speed Limit is applied. There is an extensive network of rural roads nationwide and its function is to highlight the maximum speed a vehicle can be driven when the road layout allows such in a safe manner. Indeed, the majority of drivers will never reach or exceed the National Speed Limit on many single carriageway roads because it's not possible to do so due to common geometric characteristics that include narrow roads, bends, junctions and accesses. In this regard, from a legislative perspective, it would be impracticable to sign each one of these types of roads with a speed limit appropriate for each section and therefore a driver has to exercise judgement as to what is a safe speed according to road layout/conditions.

In contrast the sections of road in this report have been classed as suburban and the Council has a duty as the Local Roads Authority to consider the speed limit that should be applied in the context of current guidance.

- The number of collisions on these roads that have resulted in injury for the 5 year period 2011-15 is highlighted below: -
 - 9 injury collisions on the A944 between Kingswells Roundabout and the 'Switchback' roundabout.
 - 2 injury collisions on the A944 Lang Stracht, between the 'Switchback' Roundabout and 30mph speed limit.
 - 2 injury collisions on the B9119 Skene Road, between the 'Switchback Roundabout' and 30mph speed limit.

The collisions that occurred are not recorded by Police Scotland as being as a consequence of excess speed and this is not unusual as only collisions where it could be definitely confirmed vehicles were travelling beyond 50mph would be cited. Accordingly, when taking into account the potential for collisions on these roads, the primary factor under review is whether they are of such quality/function they should carry vehicles travelling at up to 50mph. In this respect, and as detailed in the report, current guidance would indicate they do not meet that criterion.

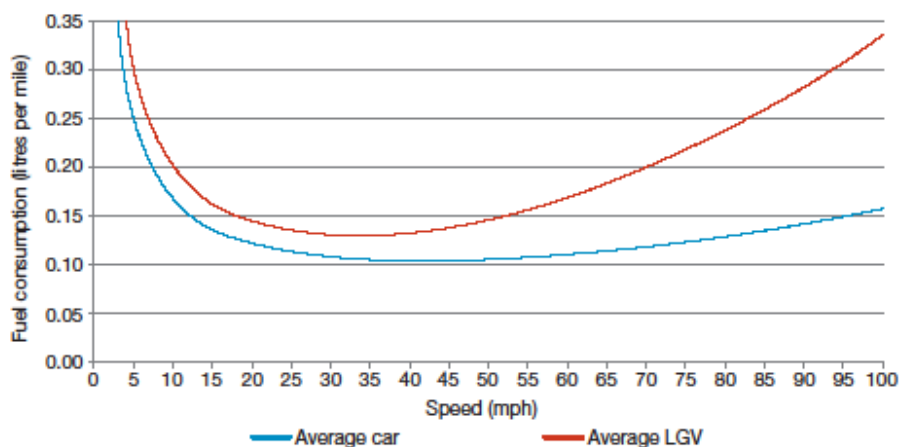
Irrespective of whether speed is a direct contributory factor to a collision, the severity of collisions is highly correlated with the vehicle speed at the moment of impact, due to the higher momentum. Research* has indicated that every 5% increase in average speed leads to an approximate 10% increase in all injury collisions and 20% increase in fatal collisions. As a result, the potential for injury reduces significantly as vehicular speed reduces. Of course, the design of a road and how it is used affects the precise relationship between speed and accident frequency and to this end the guidance produced on setting local speed limits is based on these various factors.

**Nilsson, G. (2004), "Traffic safety dimensions and the Power Model to describe the effect of speed on safety". Bulletin 221, Lund Institute of Technology, Department of Technology and Society, Traffic Engineering, Lund, Sweden*

- Concern is also expressed that a lower speed limit will lead to vehicles being driven in closer proximity to each other; with convoys of traffic forming that in turn could increase the frequency of collisions. In response, drivers become accustomed to a new speed limit and adjust their gap tolerance and speed accordingly. Furthermore, with reduced speeds, drivers will generally have more time to process information and react, thereby reducing the possibility of a collision.

- Some objectors call for the gaps in the central reservation of the A944 dual carriageway sections to be closed and this in turn could support a speed limit of 50mph. In response, this possible modification, if promoted, would still not bring these lengths of dual carriageway to a quality that would support a 50mph speed limit. Instead, as highlighted previously, a 40mph speed limit provides drivers with more time to process information/react and will thereby aid drivers who are carrying out 'right-turns' at these features.
- It's highlighted in an objection that cars travelling at 40mph are not economical in terms of fuel consumption and have a greater environmental impact on vehicles travelling at 50mph. There is, however, little difference in fuel consumption between a car travelling at 40mph and 50mph. The graph* below highlights that in combustion engine cars efficiency is at its least at low speeds, at its best and relatively consistent between 35 and 50mph, and thereafter gradually decreases again as speed increase beyond 50mph.

The relationship between speed and fuel consumption



Source: Wengraf (2012)
Note: LGV – light goods vehicle

*Wengraf, I. (2012), “Easy on the gas – The effectiveness of eco-driving”, The Royal Automobile Club Foundation for Motoring, 89-91 Pall Mall, London, SW1Y 5HS