Agenda Item	7
Report No	BI/16/22

HIGHLAND COUNCIL

Committee:	Black Isle
Date:	15 November 2022
Report Title:	Culbokie Proposed 20mph and 40mph Speed Restrictions
Report By:	Executive Chief Officer Infrastructure, Environment & Economy

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Purpose/Executive Summary

- 1.1 This report details the objection received for The Highland Council (Various Roads Culbokie) (20mph and 40mph Speed Limit) Order 2022.
- 1.2 The traffic regulation order reflects the proposed Culbokie Active Travel Scheme currently being progressed by The Highland Council and funded by Sustrans Ltd.
- 1.3 The traffic regulation order is required to allow the proposed Culbokie Active Travel Scheme to:-
 - achieve the standards necessary to safely encouraged walking and cycling within Culbokie; and
 - qualify for presentation to Sustrans Funding Panel.
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Recommendations

2.1 Members are asked to **review** the objection and approve the draft traffic regulation order.

3 Implications

- 3.1 **Resource** Apart from the preparation of the traffic order all costs will be met by Sustrans and Culbokie Community Trust.
- 3.2 **Legal** This traffic regulation order is compliant with Road Traffic Regulation Act 1984 and the Roads (Scotland) Act 1984 legislation.

- 3.3 **Community (Equality, Poverty, Rural and Island)** Extensive consultation for the traffic regulation order has been carried out for the Culbokie Active Travel scheme through the Ferintosh Community Council.
- 3.4 **Climate Change / Carbon Clever –** There are no significant benefits or issues arising out of the traffic regulation order.
- 3.5 **Risk** The Culbokie Active Travel Scheme cannot proceed to the Sustrans Funding Review Panel until the traffic regulation order has been approved. Should the draft Order need to be amended then funding approval for the proposed Active Travel Scheme will be deferred.
- 3.6 **Gaelic** This report has no impact on Gaelic considerations.

4 Background

- 4.1 There are a number of transport issues affecting Culbokie residents. These include:-
 - speeding traffic;
 - lack of a continuous footway throughout Culbokie;
 - lack of connectivity due to the elongated nature of the village;
 - over reliance on cars for local journeys; and
 - concerns from pedestrians and cyclists regarding traffic safety.
- 4.2 In 2019 Culbokie Community Trust approached Sustrans Scotland for assistance with creating an Active Travel Scheme in Culbokie. Subsequently the civil engineering consultant Pell Frischmann was commissioned by Culbokie Community Trust to prepare a concept design and undertake consultation.
- 4.3 Pell Frischmann commission was then extended to develop the concept design to take the proposed active travel scheme forward.

After discussion with all parties The Highland Council agreed to promote the scheme through to completion.

4.4 There are eight stages to Sustrans design process These are detailed as follows:-

Stage 0	Strategic definition	Set out the project vision and justify strategic
		need.
Stage 1	Preparation and Brief	Define the scope of the project and develop
_		project outcomes.
Stage 2	Concept Design	Define interventions including outline proposals
_		and preliminary cost information.
Stage 3	Developed Design	Include coordinated and updated proposals.
Stage 4	Technical Design	Technical Design prepared to include all
	_	required information for construction.
Stage 5	Construction	Construction commences according to
		programme.

Stage 6	Handover & Close Out	Construction is complete and the end of works can be formalised.
Stage 7	In Use	The project is now being used by the community and is to be maintained for 15 years after project construction

The proposed Active Travel Scheme is presently at Stage 4. A technical design and contract documents will be presented to the Sustrans Funding Panel Review in December 2022.

4.5 Sustrans design standards need to be met to qualify for funding. Constructing a cycle route separated from traffic cannot be achieved due to land constraints. Consequently, the proposed scheme includes traffic calming measures for pedestrians and cyclists to share the road with motorised traffic. Sustrans' standards require the implementation of a 20mph speed limit order.

On the approaches to the village 40mph speed limits will be required to reduce speeds from the 60mph national speed limit down to the proposed 20mph speed limit.

- 4.6 The process for creating the proposed 20mph and 40mph speed limits complies with Road Traffic Regulation Act 1984 and the Roads (Scotland) Act 1984 legislation and The Highland Council's Operational Procedures 415. A summary of the process is as follows:-
 - draft plans prepared based on Active Travel Scheme design;
 - discussed at the Black Isle Ward Business Meeting on 10 January and 13 June 2022;
 - draft Orders passed to Legal Services for checking;
 - statutory consultees consulted;
 - draft Orders are then advertised;
 - 28-day Objection Period; and
 - objections to be determined at Committee

5 Statutory Consultation

- 5.1 Draft Orders were issued to the Statutory Consultees on 21 July 2022 for a period of 14 days. The Statutory Consultees include:-
 - Chief Constable;
 - Fire Brigade/Chief Fire Officer;
 - Ambulance Service;
 - Freight Transport Association;
 - Road Haulage Association; and
 - Ferintosh Community Council
- 5.2 A total of 43 responses were received. The majority of the comments were received through Ferintosh Community Council who anonymised personal information.

Ferintosh Community Trust responded in support of the Traffic Regulation Order.

A further response was received from Miss Floydd on behalf of Mr Batten who noted he wished to formally object ahead of the objection period.

In total there were 102 separate issues raised. 63 issues raised were assessed as being directly related to the Traffic Regulation Order with a further 39 general comments.

- 5.3 All responses to the Traffic Regulation Order consultation were received within the deadline.
- 5.4 Comments directly related to the Traffic Regulation Order are summarised as follows:-

Issue	Number of comments received
Comments were either fully or partially supportive of the	31
Traffic Regulation Order	
Against the Traffic Regulation Order	5
Extent of the proposed 20 and 40mph speed limits	11
Relating to accidents or accident prevention	8
Impacts of the proposed speed limits	5
Relating to the Traffic Regulation Order process	2
Speeding	1

These consultation responses are further detailed in **Appendix 1**.

5.5 General comments not directly related to the Traffic Regulation Order are summarised as follows:-

Issue	Number of comments received
Enforcement of existing or proposed speed limits	10
Speeding	8
Resources	3
Signage	3
Traffic calming measures	3
Policy and/or Legislation	2
Traffic Regulation Order process	2
Active Travel Scheme	2
Vehicles	2
HGV Diversion route	1
Footways	1
Street lighting	1
Misuse of Speed Traffic Regulation Orders	1

These general comments are further detailed in Appendix 2.

6 Objections Received

- 6.1 The objection period started on 22 August 2022 and ended 23 September 2022.
- 6.2 One joint objection from Mr Batten and Ms Lloyd was received within the objection period.
- 6.3 No late objections were received.
- 6.4 Mr Batten and Ms Lloyd objected to the proposed draft Order citing 14 reasons. These are summarised as follows:-
 - Statement of Reasons.
 - The draft Order is unsupported by accident data.
 - Speed versus situational awareness.
 - Reduced speed limit over an extended distance within a semi-urban area can be challenging to motorists.
 - Risks to cyclists.
 - Risk to cyclists compounded by Active Travel Scheme control measures.
 - Speed limits do not apply to cyclists.
 - 20mph speed limits on unlit roads.
 - Automatic high beam car headlights not activated for speed below 20mph.
 - No evidence that street lighting will be included to resolve automatic high beam car headlight issues.
 - Active travel schemes without a 20mph speed limit.
 - Emissions (air quality and climate change impacts).
 - Enforcement.
 - Signage.

These objections are detailed in Appendix 3.

Designation: Executive Chief Officer Infrastructure, Environment & Economy

Date: 24 October 2022

Authors: Iain Moncrieff, Roads Operations Manager (Ross & Cromarty)

Appendix 1

Consultation Responses Relating to Traffic Regulation Order

Summary	Issue	Specific Issues	Comments
Fully or partially supportive of 20mph and 40mph speed limits			
Against the proposed speed limits		Proposed 20mph speed limit should be on side roads only	Important to link all of Culbokie up for pedestrians and cyclists and not individual sections
		Proposed 20mph speed limit stops near the play park which negates its purpose	Proposed 20mph includes play park and 40mph extends beyond.
		Proposed 20mph speed limit on Main Road is too long	Over the proposed 20mph the time distance between the ex 30mph and the proposed 20mph is 71 seconds
		Drivers are distracted at a 20mph compared with 30mph	
		Proposed speed limits will increase air and noise pollution	Imperial College London had undertaken a study and has disproven this link
		Accident data doesn't support TRO	Proposed speed limits are required to ensure the Active Travel Scheme design does not increase the risk of accidents.

speed limit	Mount Eagle Rd	 the extent of the Active Travel Scheme traffic calming measures. The proposed 40mph speed limit includes the remaining 9 properties on Mount Eagle Road. In addition to the 40mph speed limit there will be countdown marker signs for a further 300 yds.
Extend proposed 40mph speed limits	Extend the proposed 40mph speed limit 200m towards the A9(T)	The proposed 40mph speed limit already extends for 255 m towards the A9(T). In addition to the 40mph speed limit there will be countdown marker signs for a further 300 yds.
	Extend the proposed 40mph speed limit to cover the whole Culbokie Inn – Shore Rd and remove the proposed 20mph	The proposed 20mph speed limit starts at the existing 30mph limit.
	Extend proposed 40mph speed limit to Findon Mill junction	Count down markers will include Findon Mill junction on the B9169
	Extend proposed 40mph beyond side roads or houses Extend proposed 40mph on Mount Eagle Rd	Proposed 40mph speed limit includes side roads and houses as far as reasonably possible
	Extend proposed 40mph on Mount Eagle Rd as far as Greenleonachs junction Extend proposed 40mph speed	
	Extend proposed 40mph	Extend proposed 40mph speed limits Extend the proposed 40mph speed limit 200m towards the A9(T) Extend the proposed 40mph speed limit to cover the whole Culbokie lnn – Shore Rd and remove the proposed 20mph Extend proposed 40mph speed limit to Findon Mill junction Extend proposed 40mph speed limit to Findon Mill junction Extend proposed 40mph on Mount Eagle Rd Extend proposed 40mph on Mount Eagle Rd

	Restrict proposed 20mph speed limit to side roads only	Proposed 20mph on Main Road will criminalise motorists	The proposed speed limits will reflect the average traffic speed once the traffic calming measures in the Active Travel Scheme are built.
		May support proposed 20mph speed limit if restricted to side roads only	The proposed speed limits reflect the objectives of the Active Travel Scheme in promoting walking and cycling throughout the whole of Culbokie
	Glascairn Rd at the housing estate should be a 20mph limit	40mph is too fast for cars reversing out of drives	The proposed 20mph speed limit extends to cover the new housing development on Glasgairn Road
	Extend proposed 20mph beyond play park	(See Against comments)	
Traffic Regulation Order Process	Balachurach Road is mis-named	Only known as 'Balachurach'	The U5714 is named as Balachurach Road in the National Street Gazetteer.
	Vehicle definition	Order relates to 'vehicles' but primary legislation refers to 'motor vehicles'. Does the Order include bicycles?	Bicycles are not subject to speed limits
Impacts on Road Users	Majority affected	Majority of road users affected Unnecessary delays for road users Proposed 20mph speed limit on Main Rd is too long – delays to motorists	It is accepted that the majority of road users are affected. However, motorists driving along the proposed 20mph section of the B9169 Main Road will take an extra 71 seconds compared to the existing 30mph speed limit.
			When the Active Travel Scheme is constructed pedestrians and cyclists will benefit from enhanced facilities and slower traffic.

	Noise and/or air pollution	Proposed 20mph speed limit means having to drive in 2 nd gear which creates more air and noise pollution. Proposed speed limits will hopefully reduce noisy speeding late at night and 'rattle' from trailers	Imperial College London had undertaken a study and has disproven this link.
Accidents	Not justified on accident reduction grounds	Accident records do not justify speed limits	The proposed speed limits are required for the design of the Active Travel Scheme to meet the safety standards for cyclists and pedestrians.
	Driver frustration - cyclists	Cyclists can easily pedal over 20mph so motor vehicles can't legally overtake causing frustration and accidents	The proposed 20mph speed limit is intended as a maximum speed for traffic.
	Drivers distracted at lower speeds	Lower speeds would allow drivers to engage in distracting behaviour e.g. texting Driving to a 20mph limit (which requires more attention to the speedometer and leaves less eye and brain capacity for road situational awareness)	Several studies contradict this, and severity of accidents also reduced with lower speeds
Speeding	Not justified on speeding grounds	Not aware of speeding	The proposed speed limits are required for the design of the Active Travel Scheme to meet the safety standards for cyclists and pedestrians.

Appendix 2

Consultation Responses Not Relating to Traffic Regulation Order

Summary	Issue	Comments
Speeding	The proposed speed limits will not stop speeding	The Active Travel Scheme includes traffic calming measures.
	Cyclists can exceed 20mph	Bicycles are not subject to speed limits
	Retain part time 20mph speed limit at the school	The proposed 20mph speed limit will make the existing part time 20mph speed limit at the school redundant. This will be removed.
	Increase in speeding noted	
	Proposed speed limits will not affect locals who speed	The Active Travel Scheme includes traffic calming measures.
	Gradual speed reduction beyond 40mph	Count down markers are included in the Active Travel Scheme
Enforcement and Monitoring	Speed enforcement and/or monitoring is required	Traffic calming measures are included in the Active Travel Scheme.
	Target young and elderly drivers	Enforcement is within Police Scotland's remit.
	Remove more elderly drivers' licences	
Resources	Spend resources on road maintenance	Apart from officer time to prepare the Traffic Regulation Order and to project manage the Active Travel Scheme, all costs are funded from Sustrans and Culbokie Community Trust, subject to the successful implementation of the proposed speed limits.
Policy/Legislation	Are the proposed speed limits being implemented due to National Speed Policy?	The proposed speed limits are required to ensure that the Active Travel Scheme can meet the required safety standards.
	Over regulation brings legislation into disrepute	The extent of the proposed speed limits reflects the requirements of the Active Travel Scheme.

Signage	Improved signage required	The Active Travel Scheme will incorporate necessary signage for the proposed speed limits
	20mph repeater signs requested	20mph repeater signage is no longer required
TRO Process	Draft Orders difficult to understand	Accepted that the Draft Orders may be difficult to interpret but these are legal documents and must be written in a specific style.
Traffic Calming	Traffic calming measure required	The Active Travel Scheme includes traffic calming features.
	Remove existing traffic islands	The original traffic islands will be replaced with an enhanced traffic calming feature.
Active Travel Scheme	Active Travel Scheme original consultation had 50mph rather than 40mph speed limits	The initial design for the Active Travel Scheme started before Traffic Regulation Order. The proposed 40mph speed limits are more appropriate at the entrances to Culbokie than the original 50 mph limits.
	Speed limits to precede Active Travel Scheme	The Traffic Regulation Order needs to be made in advance of the Active Travel Scheme being presented to the Sustrans Funding Panel. The proposed speed limit signage will be erected as part of the construction process.
HGV's	HGV diversion on B9163 to avoid Culbokie	As part of the Active Travel Scheme discussions are being held with Transport Scotland to amend the signage on the A9(T) which will promote the B9163 as a HGV diversion route.
Footways	Improved and continuous footways requested	The Active Travel Scheme includes Improvements to the existing footways.
Street Lighting	Street lighting for 20mph roads	Street lighting is not required for 20mph speed limits
Vehicles	Automatic high beam car head lights do not activate under 25 mph	It is the driver's responsibility to adjust car head lights as appropriate.

	Vehicles now better designed to prevent accidents	It is accepted that vehicles are now better designed to lessen the impact of a collision for both occupants and other road users. However, the design standards require a 20mph average speed to achieve the safety standards to promote walking and cycling.
Misuse of Speed restrictions	Speed restrictions politicised by Health and Safety lobbies	The Active Travel Scheme reflects the aspirations of the community to promote walking and cycling in and around Culbokie. The proposed speed limits are required to achieve the safety standards associated with the Active Travel Scheme.

Appendix 3

Objections

Objection	Additional details	Comments
Statement of Reasons.	 Draft Order is not: In the interest of casualty reduction. To improve the safety of our vulnerable road users 	The proposed 20mph speed limit is required so that the Active Travel Scheme can achieve the required safety standards. The proposed 40mph speed limit is required to safely reduce vehicle speeds from the national 60 mph speed limit to the proposed 20mph speed limit. The Active Travel Scheme's objectives include encouraging vulnerable road users such as children to walk and cycle within the village. Reducing the traffic speeds will reduce both the risk and severity of road traffic accidents.
The draft Order is unsupported by accident data.	The Statement of Reasons purports casualty reduction, but the proposed Order is unsupported by any casualty statistics for the affected area. We regard this as a significant omission.	This is not considered to be a valid objection as accident data is not required to validate a statement of reason for a draft Order.
Speed versus situational awareness	Drivers are more road focused when driving in a 30mph speed limit than in a 20mph speed limit which requires more attention to the speedometer and leaves less eye and brain capacity for road situational awareness. This may increase the probability of accidents, a disbenefit potentially outweighing the benefit of reducing their severity.	'Reducing the speed limit to 20mph in urban areas' by P Pilkington, published in British Medical Journal 11 Oct 2007 states that the risk of a serious or fatal road traffic accident involving a pedestrian and a car is 45% if the vehicle speed is 30mph. This drops to 5% for 20mph.

		The paper further stated that Government research showed that 20mph zones reduced the incidence of traffic accidents by 60% and cut child pedestrian and child cyclist accidents by 67%, while overall vehicle speeds fell by an average 9.3 mph.
Reduced speed limit over an extended distance within a semi- urban area can be challenging to motorists.		The proposed 20mph speed limit is required to ensure that the Active Travel Scheme can achieve the relevant safety standards for encouraging active travel throughout Culbokie and not within distinct separate areas within the village.
Risks to cyclists	Respondents to Ferintosh Community Council commented on the difficulty motorists may have in safely overtaking cyclists on the B9169 if the proposed Order is implemented. Some motorists may take a risk and overtake anyway; others may become frustrated and possibly distracted while remaining behind cyclists. Neither eventuality appears to be particularly advantageous to cyclists, and in some ways the safety of cyclists (who we infer may number among the "vulnerable road users" described in the Statement of Reasons) may be compromised.	Motorists should drive responsibly and only overtake when it is safe to do so. The proposed speed limits are required to ensure the Active Travel Scheme can achieve the required safety standards.

Risk to cyclists compounded by Active Travel Scheme control measures	The effects noted above may be compounded if the proposed active travel route, with its various "control measures", is implemented; Culbokie could find itself with an active travel route which imperils active travelers (we also argue, in objecting to the proposed active travel infrastructure, that it would be detrimental to the interests of pedestrians in interactions with cyclists). None of this seems consistent with the principles underlying the hierarchy of road users introduced in the 2022 Highway Code.	The proposed 20mph speed limit is required to ensure that the Active Travel Scheme achieves safety standards to encourage travel by pedestrians and cyclists. Highway Code Rule 204 states 'The road users most at risk from road traffic are pedestrians, in particular children, older adults and disabled people, cyclists, horse riders and motorcyclists. It is particularly important to be aware of children, older adults and disabled people, and learner and inexperienced drivers and riders. In any interaction between road users, those who can cause the greatest harm have the greatest responsibility to reduce the danger or threat they pose to others.' The proposed speed limits will allow the Active Travel Scheme to be constructed to the relevant safety standards to promote walking and cycling. This is consistent with Highway Code Rule 204.
Speed limits do not apply to cyclists	We note in passing that speed limits do not currently apply to cyclists, which raises the alarming possibility of fast cyclists overtaking motor traffic in Culbokie.	 This is not considered to be a valid objection as speed limits do not apply to cyclists. Typical speeds for cyclists for a 1-hour ride are as follows: 8-12 mph for beginners 12 – 16 mph for intermediates 16 – 24 mpg for advanced cyclists.

		While it is possible that a fast cyclist may overtake a motor vehicle, research has shown that a 20mph speed limit significantly reduces the risk of accidents involving bicycles.
20mph speed limits on unlit roads	 Unlit roads. We understand that it is proposed to reduce the speed limit in the entire current Culbokie 30mph area to 20mph, and to extend the area in some places. This area includes a number of unlit roads, some of them possibly unsuitable for the installation of street lighting B9169 for approx. 200 metres between Balnatua and the southern end of the restricted zone, and for a short distance at the 1101Them extremity; C1027 Mount Eagle Road for 101 metres as described in the draft Order; U2626 Glascairn Road for approx. 200 metres between the Glascaim development and the south-eastern extremity; and U2620 Balmeanach Brae for 44 metres as described in the draft Order. 	There is no requirement to provide street lighting for a 20mph speed limit.

Automatic high beam car headlights not activated for speed below 20mph	We would ask whether there is a precedent in or beyond Highland for a 24/7 20mph limit on an unlit road. "Automatic high beam" (AHB) technology (fitted on Toyota and BMW, Ford, Honda, Lexus, Mazda, Mitsubishi and Nissan vehicles) gives rise to a difficulty with 24/7 20mph limits on unlit roads near settlements. On our 2019 Toyota, if AHB is engaged the high beam does not activate when accelerating from stationary until 25mph is reached. Under the proposed scheme, on leaving home in darkness and driving south past Balnatua (away from streetlights) at or below 20mph, we would have no high beam until we reached the 40mph sign and then accelerated through 25mph - i.e. for at least 25 seconds after passing the last streetlight. We asked our insurers over seven months ago whether the use of AHB is a condition of cover	This is not considered to be a valid objection. It is the driver's responsibility to adjust headlights as appropriate. Instructions for both activating and deactivating automatic high beam headlights for all the manufacturers listed in the objection are available on the internet.
No evidence that street lighting will be included to resolve automatic high beam car headlight issues		This is not considered to be a valid objection. It is the driver's responsibility to adjust headlights as appropriate.

Active travel schemes without a 20mph speed limit	Active travel without a 20mph limit. While we object to the proposed active travel facilities in Culbokie, we also note the recent installation of such infrastructure, in Highland, on the B851 between Farr and Inverarnie, on roads with no street lighting and with a 40mph speed limit (except around the school during relevant hours). This appears to undermine any suggestion that a 20mph limit is a necessary precursor to the active travel proposals for Culbokie.	Each scheme has different objectives resulting in different measures required to achieve those goals. The Culbokie Active Travel Scheme's objectives includes promoting walking and cycling which requires a 20mph speed limit. Given the land constraints, the proposed Active Travel Scheme requires cyclists to use the road rather than a separate cycle way. Consequently, Sustrans standards require a 20mph speed limit.
Emissions (air quality and climate change impacts)	Emissions (air quality and climate change impact). We are unconvinced that 20mph limits are good for the environment, at least for as long as fossil fueled vehicles continue to use rural roads with increased dwell time in settlements with 20mph limits. Peter has traced research on emissions, but specific to an inner London borough.	 Studies undertaken by Imperial College for the City of London Corporation show that nitrous oxide emissions for petrol vehicles are higher at 20mph than 30mph but are less for diesel vehicles. As there are more diesel vehicles a reduction in speed to 20mph will produce less nitrous oxide emissions. Particulate emissions are also less for both petrol and diesel vehicles at 20mph compared to 30mph, except for engines over 2.0l. The study concluded that 'it would be incorrect to assume a 20mph speed restriction would be detrimental to ambient local air quality, as the effects on vehicle emissions are mixed.'

Enforcement	The 2016 good practice guide 7 hyperlinked from THC's 20mph programme notes at paragraphs 40-42 that (out with the environs of schools) 20mph limits will not be routinely enforced. If there is no enforcement, the proposed Order may prove ineffective; conversely, if there is regular enforcement, it will be interesting to observe residents' response to the resultant speeding ticket statistics.	Enforcement of speed limits is for Police Scotland to undertake. The proposed speed limits will allow the Active Travel Scheme to include traffic calming features. These features will help to reduce speeding.
Signage	 Signage. We understand that repeater signage is no longer required where 20mph limits apply, provided other reminder indications are provided to drivers. We envisage that THC engineers will give due consideration to the matters, but would stress the need for some form of signage on the B9169 near Culbokie East Farm, where we understand that Culbokie Community Trust's study (in relation to active travel) highlighted the risk that drivers may forget to comply with a 20mph limit; and in cul-de-sac side roads, which would have been designed for a 30mph limit and where we would suggest that drivers (including visitors) commencing journeys would be reasonably entitled to a reminder that a 20mph limit applies. 	Repeater signs are no longer required, and all signage will be compliant with the Traffic Sign Regulations and General Directions 2022.