

The Highland Council

Agenda Item	5
Report No	CIA/12/24

Committee: City of Inverness and Area

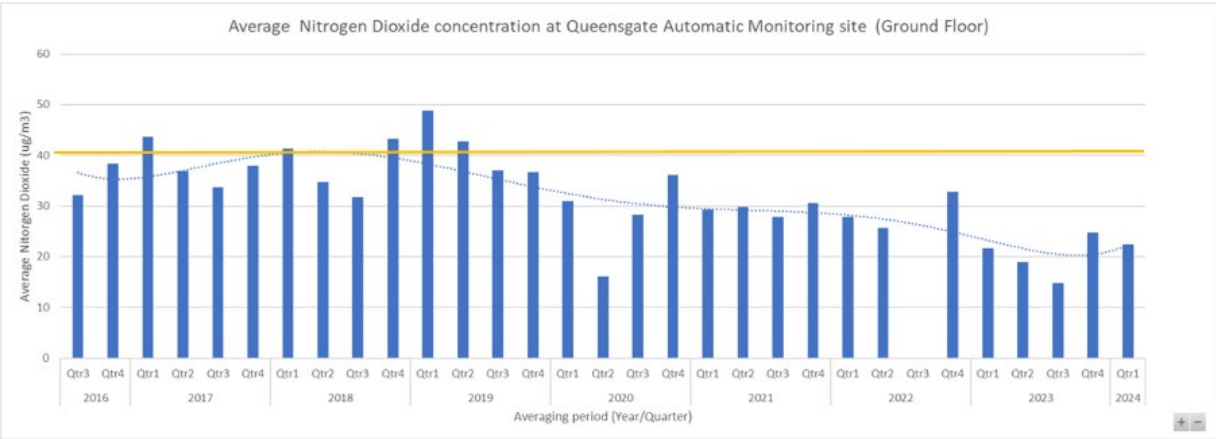
Date: 27th May 2024

Report Title: Inverness Air Quality Management Area Action Plan

Report By: Strategic Lead Environmental Health & Bereavement Services

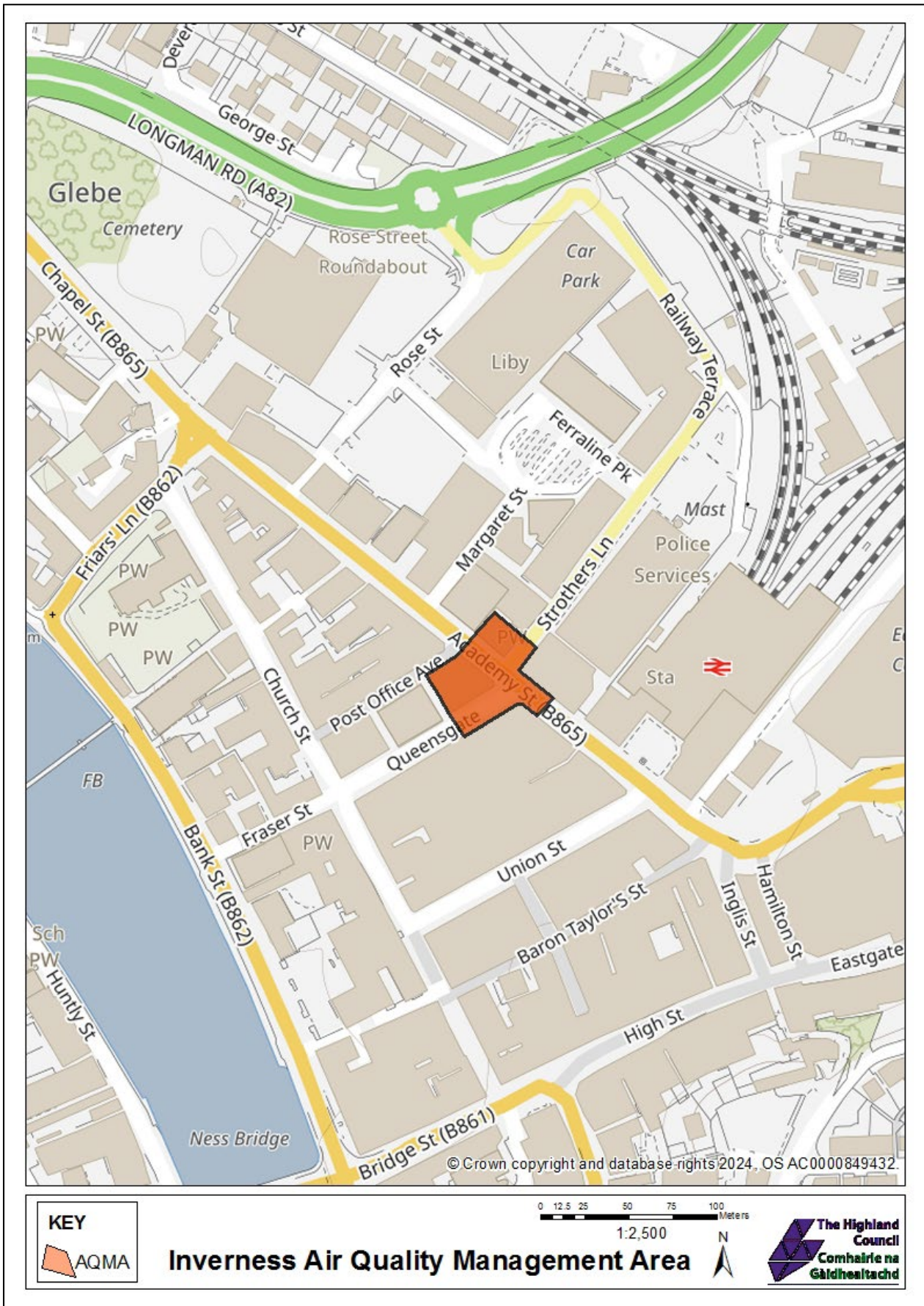
1.	Purpose/Executive Summary
1.1	This report sets out the Inverness Air Quality Management Area (AQMA) Action Plan, describing the recent trends and current status of air quality within the city centre, and setting out a table of action measures to continue to meet Scottish Government (SG) air quality objectives.
2.	Recommendations
2.1	Members are asked to: i. Note the improvements to air quality in the city centre since the first publication of the Draft AQMA Action Plan for Inverness in 2016. ii. Approve the Inverness AQMA Action Plan with the 2024 action measures table.
3.	Implications
3.1	Resource – Staff monitoring and reporting are part of general Environmental Health duties. The action measures reported are generally funded through external sources such as Sustrans or the SG. The SG has made available funding through annual application for the equipment resources required to monitor the AQMA.
3.2	Legal - The Local Air Quality Management process comes under the Environment Act 1995 and the Air Quality Standards (Scotland) Regulations 2010.
3.3	Community (Equality, Poverty, Rural and Island) - Studies have reported that health inequalities are greatest in areas of poor air quality. By continuing to provide action and monitoring air quality improvements, health equalities will be improved.
3.4	Climate Change / Carbon Clever - Many of the actions will support positive behaviour change towards more sustainable travel modes (walking, wheeling, cycling and public transport) and therefore make a positive contribution to reducing the carbon footprint of travel in Inverness.
3.5	Risk - The SG has issued updated air quality management policy guidance, stating that SEPA can issue Local Authorities who fail to agree and publish an AQMA Action Plan

	within a reasonable timeframe with an Environment Act 1995 Section 85 direction. There is a reputational risk to the Highlands if air quality objectives are not met.
3.6	Health and Safety (risks arising from changes to plant, equipment, process, or people) – None
3.7	Gaelic - There are no Gaelic implications arising from this report.
4.	Background
4.1	Under Part IV of The Environment Act 1995, the Council is obliged to review and assess air quality throughout Highland. The Act also requires that if an assessment of air quality indicates that the objective level for various pollutants is unlikely to be achieved, the local authority must designate these areas as AQMA by order.
4.2	Generally, air quality in the Highlands is good, however, a review of air quality in the city centre of Inverness in 2012 and 2013 determined a small area where air quality objectives were not being achieved.
4.3	The Air Quality objective for Nitrogen dioxide is an annual mean of 40µg/m ³ or a 1-hour mean of 200µg/m ³ , the latter not to be exceeded more than 18 times in a year. The air quality objectives only apply where members of the public are likely to be regularly present for the averaging time of the objective (i.e. where people will be exposed to pollutants). For annual mean objectives, relevant exposure is limited to residential properties, schools and hospitals. The 1-hour mean objective would also apply on the pavements of busy shopping streets.
4.4	The City of Inverness Area Committee approved the declaration of an AQMA for a small area within the city centre in September 2014 (Report CIA/43/14). This was due to measured concentrations of the Annual Mean Nitrogen dioxide exceeding the SG Objective of 40µg/m ³ in 2012 and 2013. The highest annual mean Nitrogen dioxide concentration recorded at a site in Inverness in 2013 was 46.3µg/m ³ . The Highland Council (Inverness City Centre) Air Quality Management Area Order 2014 is included in Appendix 1 together with a map of the AQMA.
4.5	It is noted that the AQMA was declared in order to protect residents within the AQMA. There was no failure of the short term objective which is designed to protect people such as shoppers and the general public. The short term Air Quality objective has been met every year in all areas monitored throughout Highland, including the AQMA.
5.	Inverness Air Quality Management Area Action Plan
5.1	The Council commissioned Air Quality Consultants to consult with stakeholders and draft an AQMA Action Plan. This was agreed with stakeholders and published in 2016 on the Air Quality pages of the Council website. The draft was used as a working document for subsequent years but was not referred to Committee for approval. A copy is provided in Appendix 2 . The AQMA Action Plan included a table of 38 action measures which were considered to offer improvements to air quality. This working table was used in Annual Progress Reports submitted to, and approved by, the SG. All the Annual Progress Reports from 2013 to the current 2023 report are published on the Air Quality pages of the Council website, and a link has been provided in the background papers.

5.2	<p>The annual mean trend in Nitrogen dioxide measured using an automatic monitor on Queensgate has recorded a sustained and significant decrease since 2020. Passive diffusion tubes are also used to monitor other locations within the city centre and other Highland towns. All Nitrogen dioxide air quality objectives have been met since 2020. The data recorded at the automatic monitor on Queensgate reported an annual mean Nitrogen dioxide for 2023 of 20µg/m³ at the pavement side, and 21µg/m³ at first floor height (location of residential properties). A graphic showing the trend at the pavement side automatic monitor is shown below. The annual mean nitrogen dioxide objective criteria of 40µg/m³ has been highlighted with yellow line.</p>  <table border="1"> <caption>Average Nitrogen Dioxide concentration at Queensgate Automatic Monitoring site (Ground Floor)</caption> <thead> <tr> <th>Year</th> <th>Qtr1</th> <th>Qtr2</th> <th>Qtr3</th> <th>Qtr4</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>32</td> <td>38</td> <td>44</td> <td>36</td> </tr> <tr> <td>2017</td> <td>38</td> <td>34</td> <td>38</td> <td>41</td> </tr> <tr> <td>2018</td> <td>34</td> <td>31</td> <td>43</td> <td>49</td> </tr> <tr> <td>2019</td> <td>42</td> <td>37</td> <td>36</td> <td>31</td> </tr> <tr> <td>2020</td> <td>16</td> <td>28</td> <td>36</td> <td>29</td> </tr> <tr> <td>2021</td> <td>29</td> <td>28</td> <td>27</td> <td>30</td> </tr> <tr> <td>2022</td> <td>27</td> <td>25</td> <td>32</td> <td>21</td> </tr> <tr> <td>2023</td> <td>19</td> <td>15</td> <td>24</td> <td>22</td> </tr> <tr> <td>2024</td> <td>22</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Year	Qtr1	Qtr2	Qtr3	Qtr4	2016	32	38	44	36	2017	38	34	38	41	2018	34	31	43	49	2019	42	37	36	31	2020	16	28	36	29	2021	29	28	27	30	2022	27	25	32	21	2023	19	15	24	22	2024	22			
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5.3	<p>In March 2023 the SG issued updated Local Air Quality Management: Policy Guidance following recommendations from an Environmental Standards Scotland review. The SG Policy update requires all local authorities to have approved final Air Quality Action Plans for their AQMAs by March 2024.</p>																																																		
5.4	<p>Many of the action measures included in the Draft AQMA Action Plan are complete or no longer relevant, therefore Environmental Health conducted a consultation review in September 2023, seeking views from internal stakeholders and SEPA. Stakeholders and SEPA provided positive feedback on the proposed changes to the action plan measures.</p>																																																		
5.5	<p>The revised AQMA Action Plan table which will form the basis of annual progress reporting to SG is provided in Appendix 3. This table is in the most recent template format provided by SEPA. SEPA have advised that the draft AQMA Action Plan does not need to be formally revised, provided that the table of action measures is updated. The action measures are a broad range of initiatives, including ongoing activities which the Council undertakes, such as promotion of active travel in schools; and significant infrastructure improvement projects such as providing a more pedestrian friendly Academy Street. In recent years, the biggest measurable improvement in air quality was observed when Stagecoach introduced an electric fleet of buses to serve local Inverness routes.</p>																																																		
6.	<p>Next Steps</p>																																																		
6.1	<p>If approved by Committee, the amended AQMA Action Plan will be formally published and submitted to the SG and SEPA for approval. The air quality within the city centre will continue to be monitored, and Annual Progress Reports submitted to the SG, with copies available on the Air Quality pages of the Council website.</p>																																																		

6.2	Should current trends continue, the Council will seek to formally revoke the AQMA in 2025.
6.3	The Scottish Government recommends that following revocation of an Air Quality Management Area, consideration should be given to providing a local air quality strategy to ensure air pollution remains below objective levels. As set out previously, it is important that the Highlands can continue to have clean air for the health of residents and its reputation as a tourism destination. The Service will look to develop a strategy with other relevant Council services and stakeholders, and will report to members.
	<p>Designation: Strategic Lead Environmental Health & Bereavement Services</p> <p>Date: 13th May 2024</p> <p>Author: Gregor MacCormick (Senior Environmental health officer)</p> <p>Background Papers: Inverness City Committee Report CIA/43/14 Link to Air Quality Annual Progress Reports 2013-2023</p> <p>Appendices (provided as hyperlinks where published on the Highland Council Website):</p> <p>Appendix 1 - The Highland Council (Inverness City Centre) Air Quality Management Area Order 2014</p> <p>Appendix 2 – Draft Inverness Air Quality Action Plan</p> <p>Appendix 3 – Inverness Air Quality Action Plan measures table 2024</p>

Appendix 1 Map of Inverness AQMA



Link to webpage: [The Highland Council \(Inverness City Centre\) Air Quality Management Area Order 2014](https://www.highland.gov.uk/inverness-city-centre-air-quality-management-area-order-2014)

Appendix 2

Link to webpage: [Draft Inverness Air Quality Action Plan](#)

Appendix 3 Inverness Air Quality Action Plan measures table 2024

Measure No.	Measure	Category and Classification	Expected/Actual Completion Year	Measure Status	Delivery Organisation(s)	Funding Source	Funding Status	Estimated Cost of Measure	Target Reduction in Pollutant / Emission from Measure	Key Milestones	Comments
1	Promote Active Travel	Promoting Travel Alternatives; Classification Intensive active travel campaign	Ongoing	In progress	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. Funding sourced from Council budget, and partners such as Sustrans			Reduction in emissions due to changeover to active travel modes	Number of schools undertaking bikeability increased.	Highland Council employs a Bikeability Coordinator to train staff & volunteers, and coordinate school bike fleet. Other Active Travel campaigns may be carried out if funding sources are identified.
2	Improvement of Active Travel Infrastructure	Transport Planning and Infrastructure; Classification Active Travel/Other	Various between 2024 and 2026	In progress and Planned	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. There are various active travel infrastructure projects in progress or planned by Highland Council in Inverness, some of which are funded or part funded by Sustrans. Some are still to attract funding. Projects include: Riverside Way – Active travel improvements Raigmore Interchange – non-motorised traffic improvements Academy Street – pedestrian friendly West of the Ness – Active travel improvements			Estimated 5µg/m ³ reduction in NO ₂ (on implementation of Academy Street redesign)	Agreement of design proposals Securing funding for project Appointing contractor for works Completion of works	Riverside way construction commenced November 2023, set to be complete in Spring 2024. Contractor: Wills Bros Raigmore Interchange – plans still to be agreed. Academy Street – Plans still to be agreed. Provisional plans approved by Highland Council September 2023. West of the Ness – Options for improving road junctions, paths etc being considered and public consultations ongoing. Areas between River Ness and Canal being considered. Designs not yet drawn up.
3	Active Travel Strategy	Promoting Travel Alternatives; Classification Promotion of cycling and walking	2024	In progress	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant.			Reduction in emissions due to changeover to active travel modes	Completion of Strategy	The Strategy will allow identification of active travel improvement projects which can then be put forward for funding when application sources become available.
4	Promote Active Travel in Schools	Promoting Travel Alternatives; classification Other	2024 and ongoing	In progress	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. This has been funded in the past by Sustrans - Safer Routes to School. The funding model will be changing in 2024, however this work shall continue.			Reduction in emissions due to changeover to active travel modes	Provision of large and small grant funding to schools	Schools can apply for large and small grant funding for improvements such as cycle and scooter storage; access improvements; pupil reward schemes (Go For It) and banners

5	School Street Zone	Promoting Travel Alternatives; classification Other	2024	In progress	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. This trial has been funded by Sustrans - Safer Routes to School.			Reduction in emissions due to changeover to active travel modes	Completion of pilots at 4 schools.	Temporary school street zones pilot for Duncan Forbes Primary, Bishop Eden Primary, Kirkhill Primary and Pennyland Primary
6	Schools Education and Monitoring Project	Promoting Travel Alternatives; classification Other	2024	In progress	Highland Council – Communities & Place	Scottish Government air quality grant scheme	Funded	<£10k	Reduction in emissions due to changeover to active travel modes	Completion of monitoring and presentations in 10 schools	Combination of NO ₂ diffusion tubes monitoring and real-time monitors for NO ₂ and PM, followed by presentation to P6/P7 pupils.
7	Promotion and encouragement of online tool for car sharing	Alternatives to Private Vehicle Use, classification Car and Lift Sharing Schemes	Ongoing	Completed	Hitrans	Not funded from Scottish Government Air Quality grant. This project has been funded by Hitrans			Reduction in emissions due to vehicle sharing	n/a	Hitrans liftshare scheme in operation: https://liftshare.com/uk/community/hitrans
8	Low Emission Buses	Vehicle Fleet Efficiency, Classification Promoting Low Emission Public Transport	Ongoing	In progress	Stagecoach; Highland Council; Other bus operators	Not funded from Scottish Government Air Quality grant. This project was part funded by Scottish Government - Scottish Zero Emission Bus Scheme and private investment			9µg/m ³ reduction in NO ₂ complete. Estimated a further 2µg/m ³ if all buses were LEV	LEV Buses on Stagecoach Inverness City Routes LEV Buses on Highland Council school transport routes LEV Buses on long distance routes	25 LEV buses on Stagecoach city centre routes since December 2022. This has corresponded with an annual decline in NO ₂ measured at an automatic roadside monitor in Queensgate from 29µg/m ³ in 2021 and 2022 to 20 µg/m ³ in 2023 – a 30% decrease (based on unratified figures). Further improvements anticipated if other buses passing through AQMA were LEV
9	EV Charge Point Infrastructure	Promoting Low Emission Transport, Classification Procuring Alternative Refuelling Infrastructure to Promote LEV	Ongoing	In progress	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. This project is funded by Scottish Government EV Infrastructure Fund			Reduction in emissions due to change of vehicle type	Continued roll out of EV charge points	Highland Council currently host over 90 EV charge points
10	Low Emission Council Fleet	Vehicle Fleet Efficiency; Classification Fleet efficiency	2030 or beyond for some ULEV large vehicles	Planned	Highland Council	Not funded from Scottish Government Air Quality grant. Funding for this project is sourced from various Scottish Government projects and Highland Council budget			Reduction in emissions due to change of vehicle type	Continued changeover to LEV to fleet when renewing vehicles	The Highland Council, in collaboration with Enterprise Car Club, now operate a fleet of 80+shared asset car club vehicles, the majority being plug-in hybrids or EV. Currently the Council operates 55 electric vehicles and 48 hybrid vehicles, which represents 14% of the light commercial fleet.

11	Bus Partnership Fund Projects	Transport Planning and Infrastructure, classification Bus Route Improvements	2028	In progress and Planned	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. Projects has been funded by Transport Scotland; however, TS propose a pause in funding from 2024.	Reduction in emissions due to increased use of bus alternatives to private vehicles	Agreement of STAG appraisals Agreement of design proposals Securing funding for project Appointing contractor for works Completion of works	<ol style="list-style-type: none"> 1. Raigmore Bus Gate linking hospital with Raigmore estate –Opened Spring 2024. 2. Rose Street enforcement camera to deter unauthorised use of Foundry Way bus link – complete. 3. City Centre Traffic Light Priority to allow bus priority dependent on real time info -upgrades ongoing. 4. Connecting Inverness STAG appraisal – submitted to TS for review (April 2023). 5. B9006 Bus Priority STAG appraisal to enhance bus journey time and reliability –public engagement complete, report under preparation. 6. Millburn Corridor Bus Priority and Active Travel STAG Appraisal which will tie into Academy St redesign - public engagement complete, report under preparation
12	Public Information about the AQMA	Public Information; Classification leaflet/internet / other	Ongoing	In progress	Highland Council – Communities & Place	Not funded from Scottish Government Air Quality grant. Public information published on Highland Council website.	Reduction in emissions due to changeover to active travel modes	Publication of Annual Progress Report on Council website	Each year the APR is published on the Council's website: https://www.highland.gov.uk/info/1281/pollution/73/pollution/2
13	Traffic Count Monitoring	Traffic Management; Classification Congestion management and Traffic Reduction	Ongoing	In progress	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. Information on vehicle numbers and type collected as part of efficient vehicle movement monitoring in the city centre by Highland Council	Reduction in emissions due to efficient vehicle movements	Provision of vehicle number and speed data to DfT	Data viewed here https://roadtraffic.dft.gov.uk/local-authorities/35
14	Planning Application Review and assessment	Policy Guidance and Development Control; Classification Air Quality Planning and Policy Guidance, and Promoting Place Based Approaches	Ongoing	In progress	Highland Council – Infrastructure, Environment and Economy	Not funded from Scottish Government Air Quality grant. Effective control of air quality planning enforcement undertaken by Highland Council as part of its statutory duties, therefore funding from Highland Council general budget.	Ensuring emissions do not increase due to development	Identifying Planning Applications which may require EIA or have significant potential air quality impacts Applying conditions to Planning Consents Ensuring that conditions are complied with	Planning Applications/developments with significant potential air quality impacts and their mitigations are reported in the Annual Progress Report