

7 February 2019		ITEM: 9
Cleaner, Greener and Safer Overview & Scrutiny Committee		
Update on Air Quality and Health		
Wards and communities affected: All	Key Decision: Key	
Report of: Mat Kiely – Transportation Services Strategic Lead		
Accountable Assistant Director: Andrew Millard – Assistant Director, Planning, Transport and Public Protection		
Accountable Director: Steve Cox – Corporate Director, Place		
This report is public		

Executive Summary

Members have highlighted concerns in relation to air quality in Thurrock and have requested an update in relation to plans to combat issues.

This report provides an update in relation to the actions, measures and initiatives that have been undertaken by the Council to tackle Air Quality issues, within specific AQMAs and for the Borough in general and sets out what is being done to support and promote healthier lifestyles and tackle health inequalities in Thurrock.

The update also includes information from the 2018 Air Quality Annual Status Report (ASR) which identifies the actions and progress towards monitoring air quality across the borough.

1. Recommendation(s)

1.1 That the Cleaner Greener and Safer Overview and Scrutiny Committee note and consider the monitoring regime, measures and initiatives set out in this report.

2. Introduction and Background

2.1 In 2017 the Cleaner, Greener and Safer Overview and Scrutiny committee endorsed the Air Quality and Health Strategy which highlighted the key aims and objectives for Thurrock as follows:

- a) Implement measures for managing air quality throughout the Borough to prevent new AQMAs from arising;
- b) Implement measures contained within the action plans for existing AQMAs; and
- c) Work with external bodies to reduce background pollution from inside and outside of the Borough.

In order to meet the above aims and objectives, the strategy adopted the following four policies in order to facilitate decision-making on air quality issues and work to prevent new AQMAs from arising wherever possible. Those policies are as follows:

	Policy	Summary
AQS 1	Tackling Transport Emissions	<p>The Council will deliver transport interventions aimed at:</p> <ol style="list-style-type: none"> I. Reducing vehicle trips and promoting a modal shift where possible to active modes of travel to future proof Thurrock's transport network for sustainable growth. II. The business community and transport service providers to discourage the use of polluting vehicles travelling within Thurrock. III. Rerouting vehicles, particularly HGVs, to avoid residential dwellings. IV. Reducing its own emissions and to influence emission reductions through its own procurement and operations.
AQS 2	Tackling health inequalities	<ol style="list-style-type: none"> I. The areas of highest need, highest deprivation and poorest health outcomes in relation to air quality will be prioritised for action on initiatives to mitigate the impact of poor quality on health. II. Work with health partners to improve long-term condition management in primary care through the implementation of the GP balance scorecard and the development of integrated healthy living centres in areas of highest need (Tilbury and Purfleet).
AQS 3	Thurrock Clean Air Zones/ Low Emissions Zones	<p>The Council will undertake a detailed review of the merits of the wider use Clean Air Zones or Low Emission Zones within Thurrock. A range of options for implementing a Clean Air Zone or Low Emission Zone in Thurrock to tackle poor air quality will be appraised. A firm proposal for a Clean Air Zone or Low Emission Zone will be developed provided that detailed consideration suggests that it is:</p> <ul style="list-style-type: none"> • Feasible and practicable; • Represents value for money; and • Likely to have local support and improves public health.
AQS 4	Future Developments and Planning	<p>Air quality policies will be incorporated into the preparation of the new Local Plan. This is to provide the planning framework to safeguard existing areas and to ensure that the type or location of proposed development will not adversely impact air quality and where possible bring about improvements, through either relocation of polluting activities or negotiation of appropriate mitigation.</p>

These policies have been translated into actions and measures that are Borough-wide, including specific actions within the existing AQMAs where pollutant concentrations are highest and within the 20% most health deprived output areas in England.

The strategy recognises the need for monitoring of air quality in order to determine whether the actions and interventions are achieving success on the ground. This report identifies the actions, measures and initiatives that have been progressed.

Clean Air Strategy 2019

2.2 On 14th January 2019 the Government launched its Clean Air Strategy 2019 which sets out plans for dealing with all sources of air pollution, making our air healthier to breathe, protecting nature and boosting the economy. The strategy sets out the comprehensive actions required across all parts of government and society to improve air quality.

The strategy sets out how Government will:

- protect the nation’s health
- protect the environment
- secure clean growth and innovation
- reduce emissions from transport, homes, farming and industry
- monitor our progress

The Clean Air Strategy underpins much of what has been identified within the Thurrock Air Quality and Health Strategy. It is encouraging to see that the Government strategy identifies a range of important and relevant areas for action and identifies a range of new legislation, powers and guidance which will be influential in how we will tackle all sources of air pollution, make our air healthier to breathe, protect nature and boost the economy.

3. Issues, Options and Analysis of Options

3.1 The following section of the report sets out the work that has been progressed across the Place, Environment and Highways directorates to support the four policy areas as set out in the Air Quality and Health Strategy.

Tackling Transport Emissions

3.2 Within the previous O&S report, a number of measures and initiatives were set out in order to identify where improvements were required, to specifically address transport emissions. The following section provides an overview of the work that has been undertaken to progress and implement those measures.

Updates and actions specific to AQMAs are set out in Table 1 below.

Table 1	
AQMA 25 – Aveley High Street	AQMA 25 – Aveley High Street: the council introduced westbound width restrictions on Aveley High Street in 2016/17. These restrictions were intended to ameliorate some of the air quality issues that arise from

	<p>HGVs in the area. Furthermore, the Council is investigating measures to prevent HGV traffic movements along Ship Lane, Aveley from being undertaken. Consultation on options commences on 16th January 2019.</p>
AQMA 26 – Purfleet Bypass	<p>AQMA 26 – Purfleet Bypass: the council continues to develop plans to deliver cycleway improvements as part of the Cycle Infrastructure Programme. A new cycle path and two new Toucan crossings have been implemented along Purfleet bypass. Additional improvements including a proposed one-way system and closure of northbound lane of Stonehouse Lane have been explored and the funding required to implement a scheme is subject to an internal funding bid.</p>
AQMA 23 – London Road, Grays -	<p>AQMA 23 – London Road, Grays: the council continues to investigate measures to control HGV movement on London Road, however these works have been interrupted as the Council awaits the completion of a private development. Investigation for a viable scheme is ongoing.</p>
AQMA 2 – London Road, Grays -	<p>AQMA 2 – London Road, Grays: the council will implement bus lane camera enforcement in London Road. “Go-live” date scheduled for 1st March 2019 with full enforcement and issue of PCNs from 1st April 2019.</p>
AQMA 10 – London Road, Purfleet -	<p>AQMA 10 – London Road, Purfleet: the council is investigating feasibility options for restrictions to the west of AQMA 10 and east of Botany Way. As part of port enhancements at CRo Ports Purfleet, the main port entrance is to be moved away from the AQMA with a new dedicated port entrance preventing HGV’s from idling along London Road awaiting entry to the port. Additionally, the Council is investigating measures to control HGV movements along London Road within the AQMA to control transient movements.</p>
AQMA 3 – Hogg Lane/Elizabeth Road -	<p>AQMA 3 – Hogg Lane/Elizabeth Road: the council is considering options to widen</p>

	parts of the A1306 to improve traffic flows. This is the subject of VISSIM modelling work, which is being jointly undertaken with Highways England. An internal capital bid has been submitted in order to allocate required funding for this scheme.
AQMA 24 – Calcutta Road, Tilbury	AQMA 24 – Calcutta Road, Tilbury: The council is progressing a scheme as part of the Cycle Infrastructure Programme. This is expected to commence in April 2019, with a new off-road cycle path running along Calcutta Road and Dock Road. Additionally, the Council is launching a new Cycle hub on Calcutta Road in March/April 2019, to help further encourage cycling and modal shift.

Borough-wide Actions

- 3.3 A programme of borough-wide initiatives have also progressed to support air quality and health inequalities. These are summarised below.
- 3.4 **South Essex Active Travel (SEAT)** – the council, along with Southend-on-Sea and Essex County Council are delivering the £3.3m SEAT programme, which targets people in a transitional stage of life to encourage sustainable travel options prior to key behavioural decision-making processes, such as commencing new employment or education. The SEAT project has reached out to local people and employers to provide Personalised Journey Planning advice, cycle training and health walks. The Tilbury Cycle Hub has been funded by Public Health S106 contribution and will be open for business this year, providing local people with the opportunity to loan or purchase recycled bikes, undertake maintenance & services and gain cycle training where needed so that local people can become more physically active.

Significant events have been held at the Orsett Show, Amazon and intu Lakeside and the SEAT programme has also seen the delivery of pool bikes, cycle hangers, E-bikes, healthy walks and bike events across the borough. More events and initiatives are planned for 2019.

The SEAT programme has also focussed efforts towards developing contactless payment options for rail stations in Thurrock. DfT are developing a consultation document to identify existing issues and requirements and the Council will be meeting with DfT colleagues as part of this process to highlight what is needed in Thurrock.

- 3.5 **Weight Restrictions and HGV Management Schemes** – implemented schemes include the completion of Towers Road HGV routing scheme

(phase1), Rectory Road width restriction scheme, Stifford Road Aveley Width restriction scheme, Ship Lane Freight Management Scheme and feasibility options for London Road, Purfleet Freight Management Scheme. The Transport Development team continue to administer the Freight & Logistics Partnership and a refreshed version of the Freight Strategy is to be developed in 2019.

- 3.6 **Improvements to Walking and Cycling** – the Council continues to deliver an extensive programme of walking and cycle infrastructure improvements secured as part of planning consents, grant funding from Public Health and the Cycle Infrastructure Development Programme (CIDP).

To date the Major Schemes team have implemented schemes at Sandy Lane, Botany Way and Purfleet bypass, Daiglen Drive, Tamarisk Rd and South Rd, Stifford Rd and West Thurrock Way.

In 2019, improvements will include Aveley bypass, Dock Road, Brentwood Rd, Orsett Heath Rd and Stonehouse Corner.

- 3.7 **School and Workplace Travel Plans** – the council secures travel plans and monitoring provisions as part of development consents. 35 out of 51 schools in the borough are actively working on their School Travel Plans and many have achieved a Bronze Accreditation.

Workplace travel plans have been adopted at numerous locations across the borough (including London Gateway, Amazon and intu Lakeside). They help to assess and mitigate the negative transport impacts of development and promote sustainable travel behaviour.

- 3.8 **Road Safety** - The Road Safety team continue to deliver a wide-ranging programme of educational and practical initiatives, with a focus placed on encouraging and enabling sustainable travel choices for future generations. The initiatives include road safety walks in all schools, roadside activities, and road safety campaigns to promote safer & sustainable journeys to school/colleges.

Some recent Road Safety highlights include:

- Bikeability Cycle Training (including Level 1 & 2, Balance Bike and Learn to Ride) in 41 Schools covering 2,400 pupils.
- Road Safety Pedestrian training in 45 Schools for 8,400 pupils
- Twilight Trail events (awareness of being Bright and Being Seen during the Winter months) held in 14 schools for 213 Yr 3 pupils and parents.
- 15 School Crossing Patrol (SCP) sites
- 15 School Travel Plans completed on-line with Modeshift STARS

Engine switch-off zones at schools will be supported again in 2019. Suitable locations will be identified using information from school travel plans and where we are aware of idling issues.

Looking forward to the current academic year and into 2019, the Road Safety team are committed to delivering even more support and initiatives across the borough. Their efforts will see the continuation of work in schools to enable all schools to achieve accreditation with a sustainable travel plan. Bikeability, Learn to Ride and Balance Bike sessions will continue to be offered to schools. Scooter Training will be offered to all pupils in Year 3 and one additional School Crossing Patrol is to be provided at Warren Primary School.

- 3.9 **Highways Development Management** – the Development Management and Traffic team continue to deliver a programme of work which supports the Council's Air Quality and Health objectives. These schemes range from new cycle routes to junction improvement schemes and tackling HGV parking issues in Grays, Corringham, Ockendon and Aveley.

Over £1m has been secured for the A126 through the DfT Safer Roads Fund and a package of safety measures will commence next year.

£1.4m of external funding has been allocated for bus priority in the Lakeside basin and additional bus priority is to be explored so that suitable funding can be sought.

The Rectory Road Freight Management scheme was delivered in 2018 following engagement with local residents, members, schools and businesses. The resulting scheme has removed HGV movements from the northern end of Rectory Rd, forcing larger vehicles to use the designated route for this area.

- 3.10 **Freight Quality Partnership (FQP)** – the council has re-established its Freight Quality Partnership to help manage the impact of HGVs in Thurrock. This group will reconvene in February to discuss the emerging Freight Strategy and to discuss issues arising from the Council's Road User Group and Congestion Task Force.
- 3.11 **A13 East facing Slip roads** - Following the announcement by the Secretary of State in October 2018 in support of the delivery of the East Facing Slips schemes, officers have been developing a process to move the scheme forward to ensure it can be delivered to the appropriate timescales. This scheme will provide relief to the road network in West Thurrock and Lakeside and will remove traffic flows from areas such as London Rd, Chafford Hundred and A1306.
- 3.12 **Vehicle Fleet** - The councils Environment and Highways directorate have now completed the replacement of over 100 vehicles across all directorates. This process has now moved the council to almost a 100% euro 6 fleet which is the cleanest emission technology at this time for standard vehicles. The council have also steered away from diesel where possible using petrol alternatives in populated areas.

3.13 **Variable Message Signing (VMS)** – The council has acquired three (3) VMS signs that have been deployed at strategic locations on the network. The VMS are used as a traffic management tool which supports minimising traffic impacts arising from incidents in the borough and at Dartford Crossing.

3.14 **Electric Vehicle Charging** – the council has undertaken a tender exercise for EV charging in 2018. However, a suitable provider could not be identified. We are therefore progressing discussions with Southend Council to identify collaborative working opportunities and to understand if an in-house option can be developed.

Progress has been made in relation to the Council advising on the requirement for EV charging and car clubs (using EVs) within the larger development agreements that are received.

Local bus operators are also adopting cleaner fleets with both Ensign and First using hybrid buses on selected routes.

3.15 **National Clean Air Day (NCAD)** – National Clean Air Day will be held on 20 June 2019. The Council will explore a programme of delivering anti-idling and no-smoking outside schools and engaging with children via assemblies, t-shirt design competitions, flyers, banners and car stickers. A communications plan will also be established to raise awareness.

Tackling Health Inequalities

3.16 Air pollution has a significant effect on public health, and poor air quality is the largest environmental risk to public health in the UK. In 2010, the Environment Audit Committee considered that the cost of health impacts of air pollution was likely to exceed estimates of £8-20 billion.

Groups that are more affected by air pollution include:

- older people
- children
- individuals with existing CVD and/or respiratory disease
- pregnant women
- communities in areas of higher pollution, such as close to busy roads
- low income communities

Everyone has a role to play in improving air quality. Local authorities have a vital role in monitoring and improving local air quality, and the cumulative effects of local action can be significant.

The Council's Public Health, Air Quality, Planning and Transport Development teams are working collaboratively to identify the areas of highest need in order to deliver focussed measures, initiatives and events such as the Tilbury Bike Hub, healthy walks, cycle training and a comprehensive communication and education programme.

Public Health continue to be pivotal in the screening of pre-application and full applications of planning in the borough through continued presence at the Housing, Planning Advisory Group and have advanced an informal Interim Planning Guidance Note (IPGN) with Planning. This details information on the wider determinants of health and communication on whether there is the need to do a Health Impact Assessment. Air Quality mitigation measures such as Active travel, greener open space, Public rights of way (PROW) will be part of the dialogue with planning and the developers.

The Public Health team continue to use the Long Term Conditions Profile card (the 'scorecard') to monitor management of long term conditions by GPs. It gives Public Health an insight into inequalities and variation across the borough, enabling us to target areas of greatest need, and an element of improvement/deterioration over time.

Public Health are part of the Board of the network group for Active Thurrock whose aim is to make sport and physical activity accessible to all Thurrock residents. The network whilst new in its implementation works with Active Essex and Sport England to get residents who are inactive Active, further working on the wider determinants of health and impact on decreasing health inequalities in the borough.

Thurrock Clean Air Zones / Low Emissions Zones

- 3.17 A Clean Air Zone or Low Emission Zone is a vehicle restricted area where vehicles not meeting a specific emission standard, or other criteria, are not allowed to enter the specified area without incurring a penalty. Local conditions will determine the scope of the emission based access controls, underpinned by national and local monitoring and modelling. Restrictions can be linked to specific vehicle types and related to Euro emission standards, vehicle age or technology. They can also be in the form of an outright ban or through variable charging. Emission based access controls can be aimed at various vehicle types from heavy duty vehicles, such as buses, taxis, lorries, vans and cars. They can also be used as a tool to incentivise the cleanest vehicles.

The concept of a Clean Air Zone has been considered by Thurrock to primarily deal with the significant number of HGV movements in the borough. Policy AQS 3 below outlines how the Council will investigate Clean Air Zones further.

Policy AQS 3: Clean Air Zone

The Council will undertake a detailed review of the merits of the wider use Clean Air Zones or Low Emission Zones within Thurrock. A range of options for implementing a Clean Air Zone or Low Emission Zone in Thurrock to tackle poor air quality will be appraised. A firm proposal for a Clean Air Zone or Low Emission Zone will be developed provided that detailed consideration suggests that it is:

- Feasible and practicable;
- Represents value for money; and
- Likely to have local support and improves public health.

The Council is progressing the alternative measures and initiatives, set out within this report, to tackle air quality issues. If these measures are determined as insufficient over time the introduction of Clean Air Zones will be explored further

Air Quality Monitoring

- 3.18 Air Quality officers are monitoring and assessing progress on air quality throughout the Borough, including the implementation, delivery and success of the Air Quality Action Plans in terms of improvements to air quality within AQMAs. The assessment and reporting of progress are reported through the AQ Annual Status Report (attached as Appendix A). The key findings / updates from the ASR are summarised below.

The main pollutant of concern in Thurrock is nitrogen dioxide (NO₂) and to a lesser extent particulate matter (PM₁₀); both of these pollutants arise from road traffic emissions. Thurrock only has AQMAs which are declared for road traffic based emissions, there are no industrial based AQMAs. The AQMAs are primarily related to NO₂ and the long-term objective or annual mean 40 µg/m³ objectives, which is the principal issue in all 18 AQMAs. Out of these AQMAs there are currently four declared for PM₁₀, for the short-term objective or daily mean objective of 35 permitted exceedances of >50 µg/m³.

The total number of AQMA's has not changed and Thurrock still has 18 AQMA's all declared for annual mean NO₂, and four of these AQMA's (5,7,8 & 10) are declared for Daily Mean PM₁₀.

In 2016 the Council undertook a detailed modelling assessment to re-determine the extent of NO₂ & PM₁₀ exceedances over most of the borough and including all 18 AQMA's. This assessment found that 8 AQMA's (including the four identified for PM₁₀ and four identified for NO₂) could be revoked if additional monitoring data supported this. However following on from this Defra recommended that the Council place further monitoring in these AQMA's to establish if they were no longer breaching the air quality objective. Once this is established they could be revoked.

In 2018 the air quality monitoring team instigated additional monitoring sites using NO₂ diffusion tubes in AQMA's 3,4,5,8,9 & 12. This has enabled additional data trends to be understood so that revocations can be explored on the basis that monitoring shows that they are well below the annual mean objective limit of 40 µg/m³ for NO₂. Likely candidates for revocation are AQMA's 4,5,8,9,12,15,16 and possibly 21, and 26. In addition some AQMA's may be reduced in size: AQMA's 1,3,13 & 24.

The Air Quality Team intend to review data through to 2020 in order to confirm which AQMA's can be revoked.

Future Developments / Planning

3.19 **Major Developments** - The Council's Highways Development Management team play a key role in ensuring that new development mitigates its impact on the highway network and wider communities. This is achieved by utilising a range of development management tools such as travel plans, development contributions for highway improvements and the provision of construction management plans where construction traffic is significant enough to impact the highway network.

3.20 **Lower Thames Crossing (LTC)** – the Council's consultation response to LTC identified a number of potential significant impacts that are misrepresented or excluded from the LTC consultation scheme.

The LTC consultation material puts a strong reliance on developing a Code of Construction Practice (CoCP) in order to control environmental impacts during construction. Technical meetings have been arranged with Highways England and Thurrock Council in order to identify how construction impacts will be addressed and designed-out from the outset to ensure that adverse environmental issues are not only being mitigated, but avoided entirely where possible.

The Council will be formally consulted on the Environmental Impact Assessment (EIA) and Health Impact Assessment (HIA) for LTC and invited to make comments on the adequacy of the data collection and analysis which is proposed. The council has engaged independent subject matter experts to inform the council's response in these areas.

The Council passed a resolution to ask Highways England to jointly establish with the council a process for independent air quality testing and provide the council with access to all data used to reach decisions. This request has been passed on to Highways England and the details as to what this means in practice are currently under discussion.

The extensive list of actions, measures and initiatives set out within this section of the report identify the comprehensive approach that the Council is taking to addressing air quality issues and health inequalities. The cross-departmental approach identifies that the responsibility for tackling these matters is something that many departments and directorates can support. There is a focus on monitoring and collecting effective data and supporting sustainable travel measures, and this report brings together the integrated package of actions that the Council will continue to deliver in order to improve air quality and tackle health inequalities in Thurrock.

4. Reasons for Recommendation

4.1 Cleaner, Greener and Safer Overview and Scrutiny Committee are invited to comment on progress made against this strategy as part of the council's commitment to appropriate scrutiny of its actions.

5. Consultation (including Overview and Scrutiny, if applicable)

5.1 N/A

6. Impact on corporate policies, priorities, performance and community impact

6.1 Better management of Air Quality in Thurrock plays a very important part in meeting the Council's priorities; particularly to improve health and well-being and protect and promote our clean and green environment.

7. Implications

7.1 Financial

Implications verified by: **Laura Iast**
Management Accountant (Environment & Highways Directorate and Place Directorate)

There are no financial implications. The actions defined in the Air Quality and Health Strategy will be delivered through existing resources.

7.2 Legal

Implications verified by: **David Lawson**
Assistant Director of Law & Governance & Monitoring Officer

There are no legal obligations. This report relates only to an update on the actions defined in the adopted Air Quality and Health Strategy.

7.3 Diversity and Equality

Implications verified by: **Natalie Warren**
Community Development and Equalities Manager

Adoption and subsequent implementation of the measures identified in the Strategy and Action Plans will support the wellbeing of some vulnerable members of the local community including those suffering from health conditions affecting the upper-respiratory system. Associated AQAPs will tackle existing air quality problems and help to bring down levels of nitrogen dioxide which may reduce the number of health impacts for people living and working in and around these AQMAs.

7.4 **Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

N/A

8. **Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

- 2018 Air Quality Annual Status Report (ASR)
- Thurrock Air Quality & Health Strategy
- Clean Air Strategy 2019

9. **Appendices to the report**

- Appendix 1 – 2018 Air Quality Annual Status Report (ASR)

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