

ITEM No ...5.....

REPORT TO: COMMUNITY SAFETY & PUBLIC PROTECTION COMMITTEE – 24 FEBRUARY 2020

REPORT ON: LOW EMISSION ZONE UPDATE

REPORT BY: EXECUTIVE DIRECTOR OF NEIGHBOURHOOD SERVICES AND EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

REPORT NO: 63-2020

1.0 PURPOSE OF REPORT

- 1.1 To advise Committee of the results of consultation with regard to potential design options for Dundee's Low Emission Zone (LEZ).
- 1.2 To seek approval to submit the response included at Appendix 3 of this report to a consultation by Transport Scotland entitled 'Scotland's Low Emission Zones: Consultation on Regulations and Guidance'.
- 1.3 To seek approval of an amendment to the objectives agreed previously by Committee for Dundee's LEZ, in light of a late amendment included in the Transport (Scotland) Act 2019.
- 1.4 To provide an update to the Committee on recent developments in respect of the use of Traffic Regulation Condition and funding support from the Scottish Government.

2.0 RECOMMENDATIONS

- 2.1 It is recommended that Committee note the contents of this report and delegate the Executive Directors of Neighbourhood Services and City Development to commit to use the grant funding allocated to Dundee City Council as outlined in section 8.2 of this report to aid progression with the development of the Dundee LEZ.
- 2.2 It is also recommended that Committee note the contents of this report and remit the Executive Director of Neighbourhood Services to:
 - submit on behalf of the Council the response included at Appendix 3 to a consultation by Transport Scotland entitled 'Scotland's Low Emission Zones: Consultation on Regulations and Guidance';
 - agree the amendment to the objectives for Dundee's LEZ as stated at Section 6.4 of this report; and
 - note that a further report will be brought to Committee at a later date with recommendation for the design and scope of Dundee's LEZ.

3.0 FINANCIAL IMPLICATIONS

- 3.1 There are no direct financial implications of this report. Reference is made to Article II of the Community Safety and Public Protection Committee of 30 September 2019 which set out grant funding provided by Transport Scotland to support work in relation to the LEZ. They will provide further grant funding in relation to the additional works referred to Section 8.2, to be utilised in this financial year. It is anticipated that bids for further support in 20/21 will be invited by Transport Scotland.

4.0 CONSULTATION ON DUNDEE'S LEZ

- 4.1 Reference is made to Article II of the minute of meeting of the Community Safety and Public Protection Committee of 30 September 2019, in which approval was given to undertake a public consultation exercise on potential design options for Dundee's LEZ. In addition, engagement has been ongoing throughout 2019 with key stakeholders and a number of events were held with specific groups during the period of the online public consultation.
- 4.2 The online survey was launched to assist in arriving at decisions on where and how extensive the Dundee Low Emission Zone will be and what types of vehicle will be included. The survey ran for six weeks from 4 October to 19 November 2019. The consultation was viewed 1902 times and a total of 1336 people completed it.

Most completions (96%) were by individuals and the greatest number of respondents (42%) live and work in Dundee. The largest single age group of respondents was those between 35 and 49 years old (29%). 44% of respondents visited the city centre most days or every day and 61% of total visitors used the car to make the journey. The largest group of respondents (41%) visited the city centre for work.

The survey included questions seeking to discover respondents' views on Low Emission Zones in general and specifically the potential options for Dundee that emerged from the National Low Emission Framework – Interim Stage 2 Assessment. 65% of respondents supported the general principle of LEZs, and 60% supported the principle of a LEZ for Dundee.

The options presented in the online consultation were;

- Option A: Inner ring road, non-compliant buses only
- Option B: As option A but excluding a section for accessing the bus station
- Option C: Inner ring road – all non-compliant vehicles, including all car parks
- Option D: Inner ring road – all non-compliant vehicles, excluding Bell Street and West Marketgait NCP car parks
- Option E: Inner ring road – all non-compliant vehicles, excluding Bell Street carpark, West Marketgait NCP car park, and Wellgate car parks

Of the options presented, the consultation produced the following results:

- 30% considered that the LEZ should apply to buses only (options A & B combined), while 64% considered that it should apply to all vehicle types
- 33% (the greatest percentage of respondents) thought option E would have the greatest impact on air quality.
- 32% (the greatest percentage of respondents) thought option E would do most promote sustainable transport
- 37% (the greatest percentage of respondents) thought option E would do most to promote Dundee as an inclusive and desirable place to live, invest, visit, and learn
- 35% (the greatest percentage of respondents) preferred option E for the design of the Dundee LEZ. Option C was the next most popular preference at 24%.
- With regard to the grace period before LEZ enforcement begins, 31% of respondents wished for this to be as short a period as possible, 36% wished for this to be as long as possible and 29% wanted an intermediate grace period preference.

Illustrations of these options are included in Appendix 1

The consultation also allowed for comment on other possible LEZ design options and a wide range of views were expressed. Out of the 1336 respondents, 641 provided some comments at this question, however not all were in respect to possible design options and included comments on LEZs in general.

Of the 641 comments, 148 respondents (11% of overall 1336 surveys) indicated that they believed that Lochee Rd should be included within the design of the LEZ. 43 of these respondents utilised the prescribed text provided for respondents by Friends of the Earth Scotland. In addition to including Lochee Road, many other streets / roads / areas were specified for inclusion to the LEZ by respondents, such as Albert Street (8), Perth Road (7), the area within the Kingsway (7), the entire Dundee Air Quality Management Area/ as large as possible (6), Hilltown (3), Victoria Road (3), Dock Street (3), King and Princes Streets (2), Forfar Road (2), West Marketgait (2), Arbroath Road (2), Blackscroft (1), the Tay Road Bridge (1), and Foundry Lane (1). 161 respondents (12% of overall 1336 surveys) wrote that there should not be a LEZ for Dundee at all, giving various reasons for this.

Other responses included suggestions that there should be smaller and more localised LEZ's, i.e. near schools (3). 29 responses included a reference to the need for Park & Rides being available.

- 4.3 The information captured in the public consultation points towards a preference for Option E for the configuration of Dundee's Low Emission Zone. This would ban all non-compliant vehicles from an area bounded by the Inner Ring road. This would follow the line of the Inner Ring Road excluding the Bell Street, West Marketgait and Wellgate car parks (and access / egress roads to these carparks).
- 4.4 In addition to the online survey, Systra, the consultants appointed to support the Council in its LEZ work, have undertaken a range of stakeholder consultation events including bus industry representatives, freight industry representatives, TACTRAN, business representatives, Community Councils, and environmental groups. Systra have prepared a report summarizing views of stakeholders, which is included at Appendix 2. During this stakeholder engagement, option C (All vehicles and no car parks excluded within the inner ring road) was the preferred option of those that stated a preferred scheme option.

Other key themes that emerged from the stakeholder engagement are:

- Concerns that parking will be displaced into residential areas neighbouring the city centre
- Maximum grace periods will be needed
- Financial support for individuals/businesses to enable them to switch to compliant vehicles
- Exemptions needed for certain vehicles (disabled drivers, vintage vehicles)
- Concerns for impact on city centre businesses
- Lack of retrofit options available for freight industry vehicles
- Natural improvement over time anyway regardless of LEZ, is an LEZ needed?

Many of the discussions held and submissions received highlighted the need for complementary measures to improve traffic flow, reduce traffic volumes and encourage use of sustainable modes of transport. Those most commonly stated were:

- The LEZ should not be implemented in isolation and needs to be part of a wider delivery programme for the city
 - Park and ride sites for Dundee were commonly requested. The south Tay Bridge site is considered "ready" by many stakeholders for a park and ride to be delivered and sites on the eastern and western edges of the city should also be considered.
 - Traffic management measures are required in the city to improve congestion and provide more journey time reliability. These should be provided as part of the LEZ package.
 - Investment in public transport, walking and cycling is required. This includes improved pedestrian access to the city centre and LEZ, additional cycle lane facilities, cycle parking and electric cycle provisions. The bus network would benefit from additional bus lanes and priority (and improved vehicles) to encourage drivers to switch to public transport.
- 4.5 The Low Emission Zone Delivery group will use all of the information gathered through the consultation process to assist finalisation of proposals for Dundee's LEZ before bringing a further report to Committee with recommendations on the scope and shape of the LEZ. The

process for doing so will take into account Scottish Government Guidance and the Regulations made under the Transport (Scotland) Act 2019.

5.0 TRANSPORT SCOTLAND CONSULTATION

- 5.1 Transport Scotland are currently running a consultation entitled Scotland's Low Emission Zones: Consultation on Regulations and Guidance. The purpose of the consultation is to set out the proposed arrangements and options related to the nationally consistent LEZ standards which will be set out in regulations in tandem with associated guidance.
- 5.2 The consultation seeks views on the use of present day Euro emission standards for LEZs in Scotland. It also seeks views on making a transformative shift to zero or ultra-low emission city centres by 2030. A further detailed consultation by Scottish Government is also planned. Views on options for exemptions from LEZs are also sought. The proposed penalty scheme for LEZs is set out in the consultation along with mechanisms imposing a surcharge for repeated contraventions in an LEZ scheme and views are sought on this as well as the general principles of the LEZ enforcement regime.
- 5.3 In relation to the proposed guidance that will accompany the regulations made under the Transport (Scotland) Act 2019 Transport Scotland are seeking a range of views on matters that will be covered by the guidance, including assessing the equalities, business and regulatory, and environmental impact of LEZs.
- 5.4 A draft response is included as Appendix 3 to this report and members are asked to approve its submission to Transport Scotland.

6.0 DUNDEE LEZ OBJECTIVES

- 6.1 Reference is made to Article III of the Community Safety and Public Protection Committee of 3 June 2019 which set out the proposed objectives for Dundee's LEZ, namely:
1. Protect public health through improving air quality in Dundee and achieving air quality compliance for NO₂ PM₁₀ and PM_{2.5};
 2. Develop an environment that helps promote more active and sustainable travel choices in Dundee; and
 3. Contributes to the ongoing transformational change in Dundee and help promote the city as an inclusive and desirable place to live, invest, visit and learn.
- 6.2 At the final stage of the Transport (Scotland) Bill passing through parliament, an amendment was made to Section 14 to include a requirement for LEZ schemes to contribute towards meeting the emission reduction targets set out in the Climate Change (Scotland) Act 2009. This is in addition to the requirement for a LEZ scheme to include an objective of contributing towards meeting the air quality objectives prescribed in the Environment Act 1995.
- 6.3 From discussions with Transport Scotland, it is understood that this additional objective has been included in the Act to allow the LEZ mechanism to be used in future to deliver on potential policy initiatives, such as 'fossil fuel free' city centres which Scottish Government has committed to consulting on in its current Programme for Government.
- 6.4 In light of this, it is recommended that objective 2, as stated at 6.1 above, is amended to:
2. Develop an environment that helps promote more active and sustainable travel choices in Dundee and contributes to meeting emission reduction targets set out in Part 1 of the Climate Change (Scotland) Act 2009.

Reference is made to Article III of the minute of meeting of the Policy and Resources Committee of 18 November 2019 where the Dundee Climate Action Plan was agreed. This plan was formally launched on 4 December 2019 and includes a range of transport related actions which are compatible with the aims of the LEZ. Both the Dundee Climate Action Plan and the LEZ scheme can be amended and updated to take into account future initiatives and policies.

7.0 PROGRESS ON OTHER LEZ ISSUES

7.1 As part of the recent £390K funding package provided by Transport Scotland in support of LEZ development, work is underway to install Automatic Number Plate Recognition (ANPR) Cameras in preparation for enforcement of LEZ's using the new Transport (Scotland) Act 2019 and subsequent regulations. This work is being undertaken by City Development at two locations in the city centre, the Seagate and Nethergate to allow officers to test the technology to ensure that any future enforcement system has been robustly assessed and is capable of enforcing the LEZ when regulations are published, the LEZ scheme is finalised and approved and any grace period has expired. The council will not be enforcing the LEZ in the short to medium term as the ANPR installations are to evaluate the technology at this stage.

7.2 The Council has also recently received an additional £450K from Transport Scotland for bus priority feasibility work and improve bus passenger waiting facilities. The bus priority feasibility work will investigate key congested junctions where public transport has specific travel time problems and develop outline bus priority measures/designs to reduce bus delay. It is proposed to involve both major bus operators (Xplore Dundee/ Stagecoach East Scotland). The new Paramics Traffic model will be used to identify these key junctions and prepare outline designs that can be taken forward to detailed design and consultation with other stakeholders. This study may also consider junctions on the Trunk road network. The objectives of the study are to encourage modal shift and support the LEZ by reducing reliance on non-compliant private vehicles. The council is working with the City Engineers and Systra to take this work forward. This work could provide a starting point for developing large scale bus priority measures in line with the Scottish Government's Programme for Government and £500million Fund for bus priority. Work is ongoing with Tayside Contracts to upgrade bus passenger waiting facilities throughout the city as part of the funding.

7.3 Systra have been developing the Paramics traffic model on behalf of the council. The base model is now completed and Systra are currently developing the future reference case model with City Development guidance. The reference case model will be used to test the LEZ options that were subject to the public consultation referred to in Section 4 of this report. The model will also be used to test possible scenarios on the Lochee Road corridor. The traffic modelling outputs will subsequently be input into the SEPA air quality model with their involvement to give a holistic assessment of both traffic and air quality. Topographical surveys of the Lochee Road area have been carried out to assist any future development and design work for this corridor.

8.0 POLICY IMPLICATIONS

8.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. A copy of the Impact Assessment is available on the Council's website at www.dundee.gov.uk/ia/reports.

9.0 CONSULTATIONS

9.1 The Council Management Team were consulted in the preparation of this report.

10.0 BACKGROUND PAPERS

10.1 None.

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11 February 2020

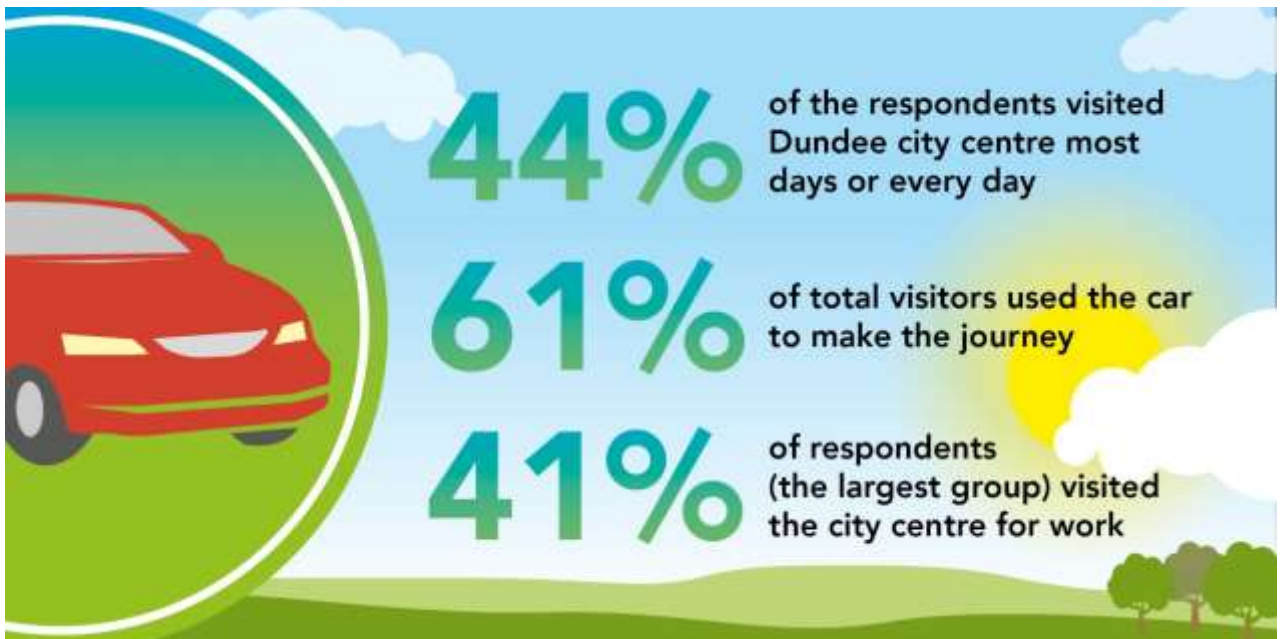
APPENDICES

Appendix 1 – Public consultation infographics

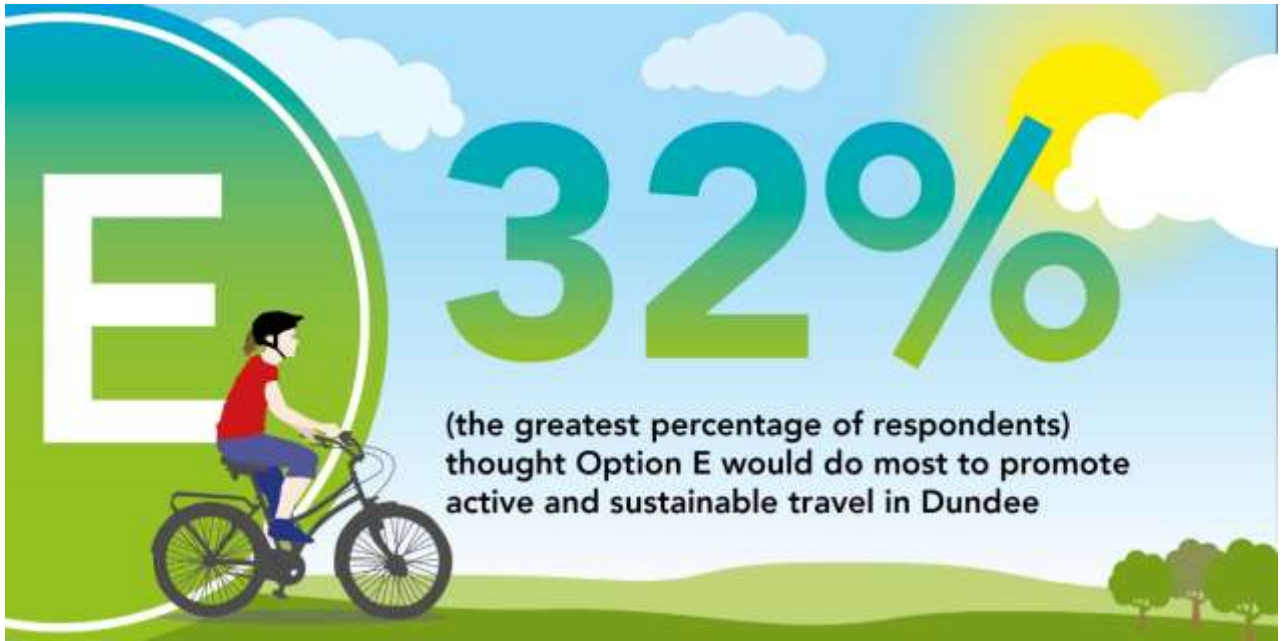
Appendix 2 – SYSTRA stakeholder engagement report

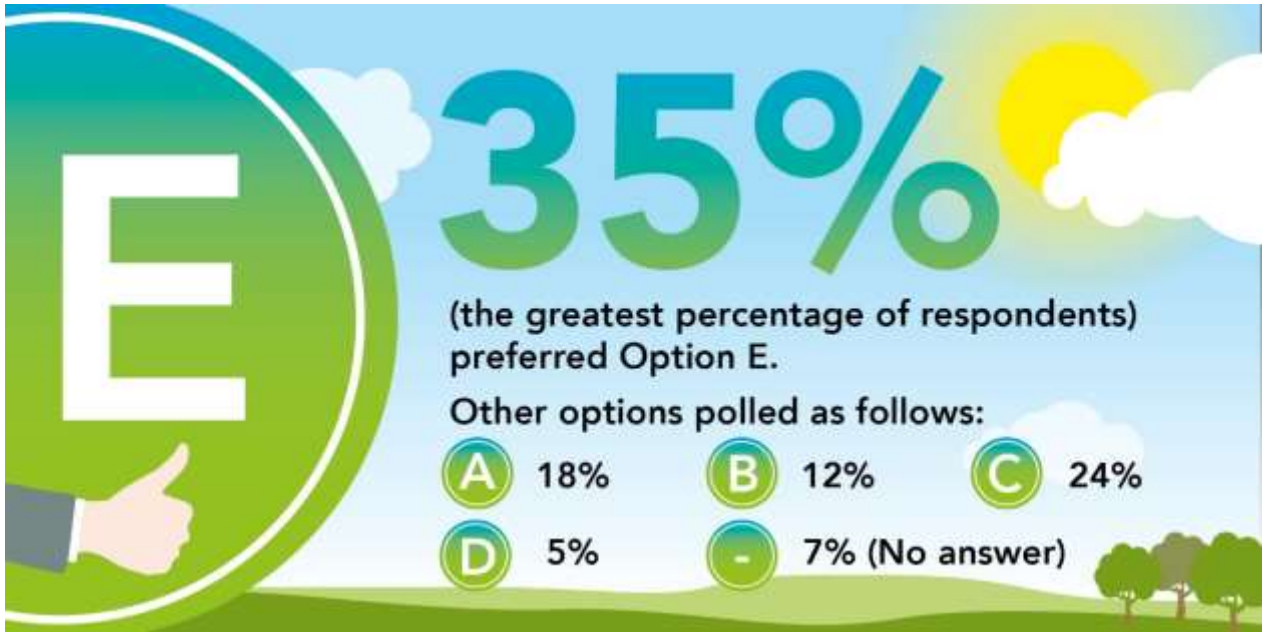
Appendix 3 – Transport Scotland Low Emission Zone Regulations and Guidance consultation response











DUNDEE LOW EMISSION ZONE

CONSULTATION ON EMERGING OPTIONS – STAKEHOLDER ENGAGEMENT REPORT

2. INTRODUCTION

SYSTRA has been commissioned by Dundee City Council (DCC) to provide support with stakeholder engagement and public consultation activities for its Low Emission Zone (LEZ) proposals. Our role has primarily involved engaging face to face with a range of key stakeholder groups, with DCC leading on administering and analysing the online public consultation.

This note provides a summary of the activities undertaken and the key themes emerging from the engagement, through feedback received during discussions with stakeholders, and from written responses received from various organisations (full submissions provided by various organisations are appended to this note).

3. SUMMARY OF STAKEHOLDERS' FEEDBACK

In this section, we summarise the key stakeholder groups have been engaged to gather feedback on the LEZ proposals.

Bus industry representatives

Stagecoach East Scotland, Xplore Dundee and Moffat & Williamson have been engaged in the development of proposals since spring 2019. Two joint face-to-face meetings were held with them (an initial meeting in April 2019 to give an overview of the process, and a further meeting in August 2019 once emerging options available, also with CPT in attendance), and they were offered the opportunity to discuss their feedback to the public consultation while it was live.

Written submissions have been received from Stagecoach East Scotland and Xplore Dundee. The key points from those submissions are detailed below. Additionally, the Confederation of Passenger Transport, the trade association for the bus and coach industry, has submitted a written response.

○ Stagecoach East Scotland

- Stagecoach supports a variant LEZ option that is a combination of Options B and E that continues to give access for both buses and coaches to the bus station via Trades Lane and Seagate (assuming the reopening of the junction between the two streets) and continues to allow access to the main car park sites around the Inner Ring Road
- They advocate a phased approach to introducing the LEZ like that of Glasgow and must be concurrent for all vehicles as “demonising” the bus will only have a negative impact on the overall image of what remains a sustainable form of travel
- In 2020/21 Stagecoach will invest in more Euro 6 vehicles which will increase the percentage of Euro 6 or above by 2% to 68% of departures in the city
- Services which are predominately Euro 4 connect the city centre with less densely populated areas and tend to be low frequency services. The Euro 5 fleet is more focused on regional

services linking Central Fife, Perth, Arbroath and Blairgowrie. In 2020/21 six of these Euro 5 vehicles are to be replaced leaving seventeen Euro 5 vehicles on these regional routes

- The cost of replacing current fleet is likely to be prohibitive currently without fully funded support. Given the current demand for Euro 6 across the UK, retrofit equipment will be limited by the capacity of the manufacturing industry, hence out of bus operators' control. As such, operators may lead to cutting services or passing on additional costs to customers
- They would like to see data in the modelled reduction in NO₂ updated to reflect 2019 data prior to the finalisation of the scheme. Data in the NLEF report does not consider the capability of buses to move larger numbers of people in comparison to other forms of transport suggesting an emission per person to be considered
- A reduction in congestion will improve bus journey times, increasing the attractiveness and use of buses, whilst reducing congestion and therefore emissions from all vehicles
- Park & Ride offers an alternative to driving privately into the city. Stagecoach is in support of a site at the south end of the Tay Road Bridge which would benefit from high frequency services utilising Euro 6 micro hybrid buses.

○ **Xplore Dundee**

- Xplore Dundee supports LEZ option C, citing that if air quality and congestion are to be taken seriously the LEZ should include all car parks and the bus station (excluding the car parks provides no incentive for motorists to consider alternative modes; including the bus station provides a level playing field for all bus operators)
- A bus-only LEZ puts the onus disproportionately on bus operators to take action
- Bus operators should be allowed a substantial grace period to upgrade their fleet as a short grace period would risk significant costs leading potentially to increased fares or service cuts
- Xplore believes that the LEZ in Dundee is a significant step forward but on its own will not encourage modal shift. As well as cleaner private vehicles, there needs to be fewer vehicles on the road. Major steps need to be taken to reduce congestion in the city; maximising the capacity of the public transport network and promoting active and sustainable travel is needed
- Transport infrastructure changes and adjustments to traffic flow are also needed to complement vehicle restrictions
- By the end of 2019 every Xplore bus service on Lochee Road will use a Euro VI vehicle. They note that the LEZ does not propose to include Lochee Road, but ask that DCC gives this further thought

○ **Confederation of Passenger Transport (CPT)**

CPT has stated that they are content for the local bus operators in Dundee to cite their preferred LEZ option, however have provided further comment on the following issues:

- They believe that it may be helpful to continue to provide access for buses and coaches to the bus station, similar to the approach adopted in the Glasgow LEZ.
- In light of the evidence in SYSTRA's NLEF report, it is imperative that an all vehicles option (Option C) is selected; the option to exclude car parks is counter-intuitive to what the LEZ is trying to achieve and will do little to encourage modal shift to more sustainable modes
- Other measures to reduce traffic volumes within the city centre must go alongside the LEZ, which could enable space to introduce bus passenger priority measures, and therefore increasing the attractiveness of buses
- They urge for bus and coach operators to be allowed a "sensible" grace period in which to replace and/or convert their vehicle to meet the required standards:

- The requirements that vehicles will have to meet to allow them to be operated within LEZs will require, in some cases, earlier investment in new vehicle purchases, with other vehicles requiring conversion work to be done
- In the absence of committed Scottish Government financial support beyond 2019 for vehicle retrofitting, combined with the risks associated with a short lead-in time, significant additional investment will have to be made by operators, ahead of their normal planned fleet investment. Some operators may find this to be unaffordable, which may see them leave the industry, whilst others faced with having to take on these additional costs, may have to look at covering them by increasing fares and/or possible service reductions
- The issues outlined above would have a very negative impact on encouraging modal shift to bus and coach use. Whilst it is clear to operators that the objectives and requirements of a LEZ are commendable, it clearly requires a sensible lead-in time to allow them to both update and change their fleets to meet the key LEZ requirements.

Freight industry representatives

The two key freight industry representatives, the Freight Transport Association (FTA) and Road Haulage Association (RHA), have been engaged since spring 2019 in the development of the proposals, through a joint face-to-face meeting in June 2019, subsequent telecon, and by asking them to help promote the proposals to their members. A written submission has been received from the FTA; in addition, a written response has been received from UPS. It is understood the RHA have engaged directly with Transport Scotland on the proposals for LEZs in all four cities (Glasgow, Edinburgh, Aberdeen and Dundee).

Furthermore, face-to-face briefings have been offered to freight representatives, as detailed later in this section.

○ Freight Transport Association

- The FTA is comfortable with the proposed geographical boundary of the LEZ. However, at a broader level, they consider the benefits of an LEZ to be short-lived and that investment is needed in measures to support those who can make changes to their fleet or operations rather than penalising those who least afford replacement vehicles
- LGVs should not be included in the LEZ unless essential as they had a later introduction date for Euro VI and therefore the second-hand market has not had time to establish (it has only had 4 years and 4 months should the LEZ go live on January 2021 which is less than the typical fleet purchasing plans businesses consider)
- Setting the LEZ framework to Euro VI means the residual asset value of Euro V vans has significantly depreciated
- Apart from one system which can be used on some refuse collection vehicles, currently there is no accredited retrofit option for HGVs to bring Euro IV or V vehicles up to Euro VI standard. Due to the technical requirements of Euro VI, if such an option were to be available for HGVs it would likely cost in the region of £15 – 20k per vehicle and, therefore, would only be potentially viable to operators of specialist high-value vehicles. For operators of ‘standard’ HGVs, any retrofit device which may be brought to market is unlikely to be cost effective and consequently will not be a compliance option for them. Therefore, for most operators, the only option is to replace the entire vehicle
- Vehicles accessing Authorised Testing Facilities should be provided with an exempt route

- A limited sunset clause should be offered for operators based within the zone who may need more time to meet the requirements
- Encourage DCC to request financial support from the UK Government's Clean Air Fund for those businesses, operating commercial fleets in and around Dundee that are going to struggle to cope with the financial implications to their operations due to these proposals

○ **UPS**

- In general terms, UPS supports objectives to improve air quality in Dundee, however they urge DCC to understand the challenges commercial fleets currently face regarding vehicle availability, grid capacity (of electric vehicles) and final mile delivery
- They welcome the proposals for grace periods for commercial vehicle operators.
- They ask for financial support to be provided for companies transitioning to low emission options, especially to electric vehicles and the corresponding charging infrastructure required, and urge DCC to work with other local authorities to lobby for a national policy on intercity vehicle charging that would see vehicles only charged once per day.

○ **Briefing session for freight representatives, 9th October 2019**

SYSTRA provided a briefing session to which RHA and FTA members were invited. Only two individuals attended (one of which was the RHA rep, the other from local haulage firm CJ Lang).

There were no concerns regarding the boundary of the LEZ, with the comment from the RHA that they had expected this to be the proposed area. Comments provided were largely on the ability for the industry to respond to any restrictions:

- In event of a no deal Brexit, tariffs on the purchase of new Euro VI vehicles will increase prices significantly
- There are currently no accredited retrofit options for HGVs (the RHA have recently been made aware of one accreditation but only on one type of vehicle)
- There will be a natural improvement in the fleet over time, which is relevant when considering grace periods. The average lifecycle of an HGV is 10 – 14 years, so by 2024 operators will be upgrading their fleet regardless of the LEZ
- The future HGV fleet will include double deck, hybrid and LNG vehicles, but current engine technology is letting the industry down
- It was noted that a badly maintained Euro VI is as efficient as a well-maintained Euro V
- Less efficient HGVs are used on shorter journeys, more expensive ones (e.g. Euro VI) used on longer runs
- The nature of deliveries are changing, resulting in more smaller vans adding to congestion

○ **Tactran Freight Quality Partnership, 26th November 2019**

A member of the SYSTRA team attended Tactran's Freight Quality Partnership meeting. Note that FTA and RHA were not present. There were no major concerns raised, but the key points were:

- If HGVs are to be included, they should have longer grace periods. Most HGVs are leased, and these are predominately Euro V (this is supported by DCC ANPR analysis where approx. 50% of HGVs are Euro V), therefore it will not be possible to change to Euro VI over a short grace period. One attendee advised that the RHA have written to Transport Scotland regarding this issue (although note that this is not something that SYSTRA have had sight of)
- It was asked whether there a possibility of a non-24hr LEZ to allow HGVs to deliver outside of peak times (although the impact on driver hours/contracts was noted)

- HGVs can carry a load much greater than multiple LGVs and therefore contribute less to congestion than multiple smaller vehicles, though there was recognition that HGVs emit more emissions per vehicle
- It was asked whether freight hubs or consolidation centres have been considered (DCC response was that past studies have found them to be unfeasible/limited usage although there is a proposal in Tay Cities Deal at Perth West). One attendee noted that many larger businesses operate their own purpose built hubs and so unlikely to change to a common centre
- It was asked if complementary measures, such as Park & Ride, are being considered (reference was made to decision being awaited on funding to progress business case, design and planning permission for site south of Tay Road Bridge)
- An economic impact assessment needs to be undertaken (it was intimated that this may be undertaken once the preferred option has been selected)

○ **Tay Cities Management Group, 31st October 2019**

A member of the SYSTRA team attended the Tay Cities Management Group meeting and presented a LEZ information session. There were no major concerns raised during the meeting.

Business representatives' briefing sessions

SYSTRA provided two briefing sessions on 9th October 2019 to which business representatives were invited. SYSTRA asked for the invitations to be promoted directly via the networks of DDOne, Federation of Small Businesses (FSB) and Dundee & Angus Chamber of Commerce.

Eleven people attended between the two sessions from the city centre-based businesses named below. The FSB representative for North East Scotland also attended:

- Dundee Rep and Scottish Dance Theatre
- Goodfellows The Bakers
- Linden Furniture
- Kenny's Music
- Henry's Coffee House
- Thorntons Law LLP
- Duncan & Todd
- Electric Bikes Scotland
- The Steeple Church
- Henry the Vintage Bus

The main focus of the discussion in both sessions was around businesses' concerns of the impact on trade the city centre with an all-vehicle LEZ option. It was highlighted that the LEZ should not be seen in isolation, but in the context of other policies that will have cost implications for businesses in the coming years, e.g. Brexit, bottle return scheme, mandatory calorie displays, etc. Several representatives also questioned whether an LEZ would be needed given that there is an ongoing improvement in air quality.

Comments provided in this regard include:

- Need a phased approach to implementation; don't want to discourage people from visiting the city centre and make it more attractive to visit out of town retail parks. Start with a bus-

only LEZ and by the time that other vehicle types are included then there will have been a natural improvement in fleets, so impact will not be as significant

- Trade in city centre is poor and declining; “DCC doesn’t understand the needs of businesses”
- There are many businesses associated with tourism; the city should want to encourage people to visit and to stay. Communicating the LEZ to visitors, especially infrequent ones, is very important
- Dundee already has high unemployment; anything seen to further impact on businesses is further detrimental
- Business representatives asked for as much information as possible well in advance, to help them and their suppliers prepare as much as possible. Financial support is needed for those who will find it most difficult to upgrade
- FSB has surveyed their members; 90% of respondents said that access by car is important for their business, whilst 50% said that deliveries using HGVs is important for their business. FSB asked for a maximum grace period to be applied
- There are limited options for new engine technology for LGVs

A significant part of the discussions related to the need for exemptions:

- There should be exemptions for disabled drivers. Certain disabled drivers can only use diesel-manufactured vehicles. It was acknowledged that this would be a small number of people and that technology may change in future, however could DCC lobby government if it becomes apparent that this is a local issue?
- There should be exemptions for vintage vehicles. The owner of Henry the Vintage Bus stated that they would strongly consider undertaking tours in locations other than Dundee if they will be faced with a penalty charge. Also, classic and vintage cars that transport wedding parties to and from city centre churches should be exempted. It is important for those local residents and would have negligible impact on air quality
- Older people who are not registered disabled but rely on car access will be affected
- A question was asked about whether minibuses are classed as a bus or an LGV

Discussions also covered the need for complementary measures:

- Action needs to be taken to reduce the volume of traffic in the city by encouraging people to use alternative modes
- Provision is needed for car parks and Park & Rides at the edge of the LEZ boundary/on the outskirts of the city rather than just changing their vehicles
- The question was raised about how Lochee Road air pollution problems will be tackled if it is not part of the LEZ

Community councils

Members of SYSTRA’s team presented proposals to the following groups:

○ **Stobswell Forum, 2nd October 2019, Arthurstone Library**

There were approximately 20 people in attendance. There were no particularly strong views expressed either for or against the LEZ proposals, either for the concept or the specific recommendations.

Most of the discussions related to people's views about the need to introduce other measures to improve air quality, specifically around improving traffic flows at junctions. Traffic flow on the Forfar Road is clearly a concern in the area.

The only concern raised specifically relating to the LEZ was the potential for it to result in more city centre overspill parking in Stobswell and other areas.

○ **City Centre & Harbour Community Council, 12th November 2019, Committee Room 4, 14 City Square**

Nine people were in attendance (including John Berry from DCC who was there to discuss the proposed residents' parking strategy). There were no particularly strong views held either way, with a couple of individuals commenting that the area within the inner ring road seemed logical and would have relatively minimal impact (on traffic flow). Key concerns/comments noted were as follows:

- There needs to be an economic impact analysis undertaken and this will need to influence final decision making. There are concerns that the LEZ could be damaging for local businesses, so the positive economic benefits need to be reinforced
- There is a risk that parking will be displaced outside the LEZ boundary
- The LEZ needs to complement the proposed residents' parking strategy (there are approx. 400 residential parking permits in the city centre)
- Investment is needed in cycle routes to encourage modal shift
- Buses are observed to have engines running while idling for more than a few minutes. If bus drivers did this, then an immediate benefit would be felt. John Berry advised that drivers are instructed to do so by bus company management, but it is not possible for DCC to enforce. It was suggested that the Community Council could raise this as an issue with DCC

○ **West End Community Council, 12th November 2019, Logie & St John's Parish Church**

There were 24 people in attendance with key concerns/comments noted as follows:

- The modelling work needs to account for more recent (than 2017) data
- There needs to be other traffic management measures considered on Lochee Road, including banning right turn movements at Cleghorn Street, and looking at timings of traffic lights
- The population is ageing, and will be more reliant on private vehicles. Exemptions for disabled drivers are needed
- It is important for the LEZ to be mapped against all other DCC policy areas
- There is a risk that parking issues are displaced from the city centre into neighbouring residential areas
- There needs to be particular financial support for city centre residents who will have non-compliant vehicles

Environmental/other groups

Members of SYSTRA's team presented proposals to a meeting of Green Groups representatives, including British Lung Foundation, Friends of the Earth Tayside, Friends of Riverside Nature Park, Scottish Wildlife Trust and Extension Rebellion. Key comments received during the meetings included:

- Is the infrastructure and investment involved in implementing the LEZ worth it, or whether air pollution could be addressed more effectively through improved public awareness, information and advice?

- An ambitious LEZ can be a valuable way to incentivise behaviour change.
- Park & ride scheme would work well, particularly on the south side of the Tay Road Bridge.
- There needs to be developments and policy to promote walking in the city centre in tandem with the LEZ?
- British Lung Foundation in general support the LEZ but believes more needs to be done to improve health and move public to active/sustainable transport and suggest an ultra-low emission zone. Their preferred options is All Vehicles, All car parks (Option C).
- Concern there are no effective bus routes in some parts of the city with some places not served well (anecdotal)
- Behavioural change is most important. How does the city get the message out that short journeys should not be taken by car? Campaigning should be done at schools to help with this message. Could cycling lessons be introduced at schools?
- If the city centre is a LEZ (so has “cleaner air”), will the rest of the city be considered dirty? Get message out that this is helping whole city, particularly with improved bus fleets. It’s not just the city centre that matters, entire city will benefit.

In addition, written submissions have been received from the following organisations. The key points raised are detailed below:

○ **Dundee Civic Trust (DCT)**

Overall, DCT supports the development of the LEZ and of the geographic boundary proposed. They request a phased approach to implementation, starting with a bus-only LEZ, with the impacts on air quality monitored for the next three years.

Following that, DCT would support a situation that, where non-compliant diesel and petrol cars were to be restricted in future, that access to the car parks on the inner ring road is maintained to minimise displacement of parking problems in surrounding residential areas.

In addition, DCT asks for the following to be considered:

- For grace periods to be extended for those operating school/community/charity buses/minibuses owners and for car hire companies
- For restrictions to apply to taxis, again on a phased approach
- For heritage vehicles to be exempted from the regulations
- For tree planting to be increased within the city centre and on Lochee Road, to for air quality and aesthetic benefits
- For the economic impact on businesses to be undertaken and monitored on an ongoing basis

○ **Dundee Resource & Re-Use Centre (DRRC)**

DRRC provided a written response with the headline statement that all stakeholders must work together to rise to the challenge of our climate and environmental emergency. DRRC also note

- In its response, DRRC suggests that DCC looks at alternative scenarios, such as in Nottingham where buses have been retrofitted, rather than replaced, to Euro VI standard
- DRRC have concerns with real life driving emissions being significantly worse than in laboratory tests, which throws into doubt the emissions modelling that has been undertaken
- The majority of DRRC’s response focussed on complementary measures that need to be introduced to manage and mitigate traffic demand, including:
 - Measures to reduce the number of private vehicles entering the city

- Limit through-traffic to northern section of Inner Ring Road
- Public and private sector organisations to promote active travel through training and incentives
- As an alternative to workplace charging levy, organisations must reduce staff journeys to work by working from home, flexi-working, job sharing, and promote bike use for commute and business journeys
- Demand responsive transport, cooperation between service vehicles
- Improvement in public transport
- Park & Ride
- Increase uptake in the use of electric vehicles
- A 20mph limit within the Inner Ring Road

○ Friends of the Earth Tayside (FoET)

Friends of the Earth Tayside (FoET) completed the online public questionnaire and provided a written response to raise some wider points for considerations

- In its response, FoET supports LEZ option C, however states that the proposals “fail to offer a complete response to the main problems of air pollution”, citing the exclusion of some of the key air pollution hotspots from the LEZ (including Lochee Road, Dock Street, etc.); whilst at the same time recognising the justification for why these locations are not part of the LEZ
- FoET highlights the importance of progressing the LEZ as part of a “mutually-reinforcing set of measures to tackle air pollution whilst also encouraging a shift towards more sustainable transport options including active travel. This would enable the message to be more positive and transformational...”
- This broader strategic development of the LEZ needs to also consider the following complementary measures (which will also help tackle pollution problems at hotspots not proposed for inclusion in the LEZ):
 - Further development of infrastructure and regulations to encourage the use of electric vehicles
 - Wider introduction of 20mph zones and redesign of streets to make them safer and more pleasant for walking and cycling
 - Development of a more extensive network of safe cycle routes and footpaths
 - Extension of bike hire facilities in the city centre
 - Introduction of the workplace car parking levy along with support for employers encouraging staff to use alternative travel or working flexibly from home
 - Creation of Park & Ride facilities at the main entry points of Dundee combined with cycle hire (including specifically near Coupar Angus Road/Kingsway junction)
 - A more innovative approach to public transport, such as demand responsive bus services, fare reductions at certain times to attract new customers, and carriage of bikes
 - Extending the coverage of air pollution monitors to include schools in the high-risk areas and the Central Waterfront, to improve the extent and quality of data to inform future policy-making
- FoET has expressed concern that air pollution modelling may be compromised by faulty laboratory test figures used by vehicle manufacturers. They ask for the identification of vehicles to be restricted based on the road test data rather than lab test data.

Taxi representatives

Members of SYSTRA's team presented proposals to the Taxi Liaison Group on 28th October 2019.

In general, there were no strong objections to the proposed LEZ. It was considered that if all car parks included in the LEZ, that this could generate some benefit to the taxi trade (those needing vehicle access to the city centre using taxis rather than sustainable modes).

Other comments made:

- Transport Scotland funding for LPG conversion of TXII/TX4 (black London cab) is not appropriate for Dundee as the majority of taxis are saloon style cars, and therefore not applicable for conversion
- 50% of the taxi fleet is currently non-compliant. The majority of taxis are bought on a five-year finance plan therefore the number of non-compliant vehicles will reduce as finance plans are renewed, therefore in five years, the proportion of non-compliant taxis will be lower. Drivers must be made aware of what qualifies as a compliant vehicle so they do not purchase a non-compliant one (considered unlikely but not impossible)
- Wheelchair-adapted taxis can be reasonably old vehicles but are still well within their lifecycle. Fitting taxis with this specialist equipment is very costly and the cost of replacing vehicles if non-compliant may be prohibitive, which could impact on the availability of accessible vehicles
- Clear communication with taxi drivers and representatives is needed in advance of implementation (suggested methods included a flyer provided to drivers alongside licence material posted out by DCC (anecdotally, many drivers do not read all licence notes but are more likely to read a flyer)) and on electronic display/noticeboards at taxi test centre)

In addition, SYSTRA was contacted by email by Chris Elder, Secretary of Unite Union (Taxi Branch). He requested that:

- Unite has the opportunity to participate in future discussions regarding the LEZ, should an all-vehicles option be decided
- Greater funding options for the taxi trade are considered by Transport Scotland, given that the existing funding is inapplicable to the Dundee fleet

Car park operators

SYSTRA made contact with management at NCP and Wellgate Shopping Centre on several occasions to offer to hold a one-to-one discussion on their views on the options for car parks within the proposals. Despite these attempts, neither returned that contact.

4. KEY THEMES EMERGING FROM FEEDBACK

Of those that stated a preferred scheme option, Option C (All vehicles and no car parks excluded) was the preferred option. The following response was noted by individual stakeholders:

- Stagecoach East Scotland – combination of option B and E
- Xplore Dundee – Option C
- CPT – Option C
- FoET – Option C
- British Lung Foundation – Option C (noted in meeting minutes)
- Taxi Liaison group – Option C (noted in meeting minutes)
- Business representatives – note that restricting private vehicles may be negative to local businesses in LEZ area.

Other key themes that emerged from the stakeholder engagement are:

- Concerns that parking will be displaced into residential areas neighbouring the city centre
- Maximum grace periods needed
- Financial support for individuals/businesses to enable them to switch to compliant vehicle
- Exemptions needed for certain vehicles (disabled drivers, vintage vehicles)
- Concern for impact on city centre businesses
- Lack of retrofit options for freight industry
- Natural improvement over time anyway regardless of LEZ – is an LEZ needed?

5. RECOMMENDATIONS FOR COMPLEMENTARY INVESTMENT

Many of the discussions held and submissions received highlighted the need for complementary measures to improve traffic flow, reduce traffic volumes and encourage use of sustainable modes. Those most commonly stated were:

- The LEZ should not be implemented in isolation and needs to be part of a wider delivery programme for the city
- Park and ride sites for Dundee were commonly requested. The south Tay Bridge site is considered “ready” by many stakeholders for a park and ride to be delivered and sites on the eastern and western edges of the city should also be considered.
- Traffic management measures are required in the city to improve congestion and provide more journey time reliability. These should be provided as part of the LEZ package.
- Investment in public transport, walking and cycling is required. This includes improved pedestrian access to the city centre and LEZ, additional cycle lane facilities, cycle parking and electric cycle provisions. The bus network would benefit from additional bus lanes and priority (and improved vehicles) to encourage drivers to switch to public transport.

6. WRITTEN SUBMISSIONS FROM STAKEHOLDERS

Written submissions are detailed below as provided by each stakeholder. No changes have been made to the text (other than some formatting changes) from that received by SYSTRA.

Stagecoach East Scotland

Overview

Stagecoach East Scotland supports the drive by Dundee City Council to improve the city centre for the benefit of the many residents and visitors to the city. We firmly believe that public transport plays an important part in delivering the dramatic change a city such as Dundee should be seeking. Offering a city centre that is an attractive destination that is designed around all forms of sustainable travel whilst restricting the unfettered use of the private car and all of the many issues this creates.

For this reason we would support a variation of LEZ Option 2C that continues to give access for buses and coaches to the bus station (as per Option 1B) via Trades Lane and Seagate (eastern end), assuming the reopening of the junction between Seagate and Trades Lane, applies the LEZ to all forms of road transport rather than only targeting bus users and continues to allow car park access to the main sites around the Inner Ring Road. We believe this is a fair solution to all and offers you the greatest benefits both in air quality and in placemaking for the future of the city centre.

We would advocate a phased approach to introducing the LEZ in a similar fashion to that successfully adopted by Glasgow which ensured any potential impact on service provision are averted. This phasing must be concurrent for all vehicles as demonising the bus will only have a negative impact on the overall image of what remains a sustainable form of active travel and of much greater benefit to the city than increasing car use.

Our Current Network

We provide a number of local bus services on both an urban and interurban basis to or through Dundee. These services form part of a network that provide the only public transport links to surrounding towns and express coach to other regional destinations ranging from Aberdeen, Edinburgh, Glasgow and Perth. Full details of the services including their routes within the LEZ area, frequency and vehicles used are shown in Appendix A. The services are mostly operated on a commercial basis without subsidy and are thereby reliant on revenue from customers to fully cover the costs of operation.

Our customers make around 7.7 million passenger journeys each year on these services alone of which around half are entitled to concessionary travel due to disability or age, both young and old. Many may not have access to private transport and rely on the bus to access employment, education, healthcare and retail services for all sectors of the community and importantly contributing to the economic life of the city centre. For this reason we do not want to see punitive measures taken against buses which in turn impact on the most vulnerable in society and the vibrancy of the city.

Whilst we believe we do a good job serving our communities it is reassuring that our customers in Dundee and Tayside recorded the highest satisfaction levels of any bus passengers in the UK, according to independent Transport Focus research in 2018, with 97% of those surveyed reporting that they were satisfied with the service being provided.

Our Vehicles & Investment

We recognise that as a bus operator we have an important part to play in the environmental objectives set out by the Scottish Government and Dundee City Council. Since 2014 we have invested £12.2 million in new vehicles for our Dundee services that are either Euro 6, Euro 6 hybrid or Euro 6 micro hybrid. Breaking down the number of departures per week this means some 66% of departures from the city centre are currently scheduled to be operated by a vehicle meeting Euro 6 or above.

Breakdown of all Stagecoach departures from the proposed LEZ by week and Euro rating;

Engine Rating	Departures per week	
Euro 4	498	15%
Euro 5	645	19%
Euro 6	360	11%
Euro 6 Hybrid	1220	37%
Euro 6 Micro Hybrid	600	18%

We expect to invest a further £1.7 million during the financial year 2020/21 in further Euro 6 vehicles at which time the percentage of Euro 6 or above will increase to 68% of departures.

In addition to the substantial investment made during this time our existing fleet now operates on a mix of biodiesel and ongoing driver training and vehicle monitoring through the use of Greenroad technology ensures that our vehicles are driven in a fuel efficient and safe manner. We were the first operator to achieve the ECO Stars Fleet Recognition Scheme within Dundee before then rolling this out to our whole East Scotland business.

Number of Euro 4/5 rated vehicles scheduled for use on Dundee network;

Euro 4	11 vehicles
Euro 5	23 vehicles (of which 6 expected to be replaced in 2020/21)
Euro 6 (inc hybrid)	55 vehicles

It should be noted that the services that are predominantly Euro 4 operated are linking the city centre with less densely populated areas such as Tayport, Newport, Wormit and Gauldry in Fife and Invergowrie and Kingoodie to the west. These tend to be on low frequency services and those with financial support from the local authorities.

The cost of replacing or retrofitting (to meet Euro 6 standards) the current fleet is likely to be prohibitive at this time without fully funded support. Dundee is not alone in progressing proposals for cleaner air zones and as such the case for investment in fleet renewal is not as simple as assessing these routes, rather it has to be set against the investment needs of routes across the four Scottish cities and the wider UK. Until such times as the Scottish Government can offer Scottish operators

parity in the funding of retrofitting technology (English operators can claim 100% of the cost whilst Scottish operators are limited to 40%) there remains a risk to the viability of these routes should an immediate implementation of Euro 6 be required within the LEZ.

In applying the LEZ and considering timeframes for adoption of Euro 6 standard the supply of retrofit equipment will be limited by the capacity of the manufacturing industry given the push for similar standards across the UK in a similar timescale and as such it may be beyond the bus operators' control as to the speed of retrofitting. In these circumstances operators may face the choice of cutting services or passing on additional costs (for LEZ fines for example) to customers.

The need to ensure public transport provision is not lost from these smaller communities and that current passengers are not pushed towards unsustainable car travel in the name of progress should not be ignored. And whilst the majority of the impact lies outside of the Dundee City Council boundaries transport does not recognise these artificial lines on a map and therefore we would call on you to work alongside neighbouring authorities to ensure the needs of the communities continue to be met. Bus passengers from these communities will continue to require access to city centre facilities and it would seem to strike at the notion of inclusion to simply accept those living in rural areas simply do not have the right to access the same public services as those living in urban areas.

Where older vehicles are in use and these services are operated on behalf of the local authority, such as Dundee City Council's service 202, then the cost of vehicle upgrades will fall upon the public purse through increased subsidy in order to maintain the current level of service be that now or at the next retendering exercise.

The Euro 5 fleet is more focused towards regional services linking Central Fife, Perth, Arbroath and Blairgowrie. These services generally have a stronger financial base thanks to the larger communities being served. Allowing for the investment in financial year 2020/21 to replace six Euro 5 vehicles this will still leave us with seventeen vehicles scheduled for use on these important regional services. An estimated cost of replacement would currently stand at around £3.5 million and as such a phased investment plan would be required to allow for their replacement.

Adoption of the phased approach deployed by Glasgow City Council which has seen Euro 6 requirements banded to require 20% compliance in year one, 40% in year two, 60% in year three, 80% in year four and full compliance from year five allows for balanced investment in the bus fleet and avoids the potential need to withdraw or reroute services. With the planned lifespan of a vehicle being around sixteen years a bulk purchase of fleet at this stage may limit the options for alternative fuel sources to be introduced as quickly as would otherwise be the case.

Emission Reduction Assumptions

The Interim Stage 2 Assessment as prepared by Systra modelled reduction in NO₂ based on data from 2017. Given the investment in newer buses by all operators within Dundee since that date we consider that the reduction of 19.2% expected from introducing the LEZ for buses within the Inner Ring Road is unlikely to be achieved post LEZ introduction as the reality will be that a large amount of those savings will already have been achieved prior to introduction. We would like to see information updated to reflect 2019 data prior to the finalisation of the scheme. Anecdotally we understand emission levels in Seagate have noticeably reduced since 2018 when we introduced new vehicles on our St Andrews to Dundee service.

Data presented in this report fails to consider the capability of buses to move large numbers of people in comparison to other forms of transport. If it were to be considered on an emission per passenger basis the bus would be seen to be much more environmentally beneficial than the car. We feel it is an

opportunity missed not to consider emissions in this wider context especially given the possible impact of increased car usage should a bus only LEZ lead to contraction in the bus network.

The other area not considered is the impact that congestion has on emissions. Delays to bus services caused by congestion and subsequent lengthening of journey times are responsible for a loss of patronage on these services and the slower running speeds of the vehicles result in increased emissions as the diesel engine is less efficient at slower speeds. A solution that encourages and prioritises bus use across the city region can increase patronage whilst reducing congestion and therefore emissions from all vehicles and from the existing bus fleet.

Our scheduled journey times have been increased in the ten year period up to 2018 by up to 20% between Ninewells and the city centre with increases of up to 31% on peak journeys from Broughty Ferry to the city centre. Such increases increase the number of vehicles required, the emissions created and the cost of operation with a consequential increase in ticket prices.

The ambition set out by the First Minister in the Programme for Government commits £500 million to bus services through infrastructure improvements and we are committed to working with our local authority partners to maximise the benefits available to customers and our communities.

Assuming the potential saving from buses is shown to be lower and the wider benefits from reducing congestion we believe this will further support the adoption of a LEZ that covers all vehicle types within a common timeline.

Supporting Measures

In order that the best solution can be delivered for Dundee, supporting both reductions in emissions and an improved city centre environment, we consider it essential that the LEZ is supported by additional measures.

Improving bus journey times through reduced congestion as detailed above is a very important consideration and combined with supporting measures can deliver substantial modal shift. We believe that park & ride offers a real alternative to driving private vehicles into our city centres. Our experience of the Ferrytoll and Halbeath Park & Ride sites in Fife and now the adoption of the Forth Road Bridge as a Public Transport Corridor offering priority to buses has been extremely positive. In the year following the reopening of the Forth Road Bridge demand on our services from the Park & Rides to Edinburgh grew by 12%. The following year further growth of 12% has been experienced. Through use of the bus service over 350,000 car movements have been removed from the city's roads each year.

Dundee currently lacks a park & ride offering however the opportunities that exist should be capitalised upon alongside the introduction of the LEZ. A park & ride at the south end of the Tay Road Bridge would benefit from a high frequency of services directly into the city centre utilising Euro 6 micro hybrid buses offering up to 14 journeys per hour based upon current service levels. There would be no additional operating costs, given the current routing of services passes this point, unless demand calls for increased capacity. This makes the solution a financially sustainable model from day one rather than requiring a dedicated service which then calls for public subsidy.

Other sites around Dundee, although not necessarily within the boundaries of the city itself, offer further opportunities and may go some way to relieving the air quality issues in areas outwith the Inner Ring Road proposed LEZ such as Lochee Road and Forfar Road/Kingsway.

Conclusion

We support the need to improve air quality but we will continue to provide a voice for the bus users who could be adversely impacted by a poorly planned implementation or a biased approach which fails to consider the wider benefits the bus network offers to the city or ignores the air quality impact of other vehicles and the congestion they create.

A planned approach to implementing a LEZ that deals with all vehicles and is supported by schemes to reduce congestion and encourage modal shift is the solution that offers most to the city as a whole.

For this reason we support a phased introduction of the LEZ with limits on buses implemented over a period of time, in a similar fashion to the Glasgow scheme, whilst the supporting measures can be introduced thereby ensuring the continuity of service provision during that time. We also recognise that we will continue to invest in the bus fleet within Dundee to ensure the improvements made in emissions in the past five years continue and increase.

A revised LEZ Option 2C that gives some access to car parks whilst also allowing access to the bus station is a sensible balance that continues to recognise the role the car plays but also the equal importance to the economic vitality of the city centre that bus users bring.

We remain open to working with Dundee City Council in order to deliver the best outcome for the city and for the long term benefit to the community.

Appendix A – Current Service Provision within the Proposed LEZ

X7 Perth Royal Infirmary – Perth – Ninewells Hospital – Dundee – Arbroath – Montrose – Aberdeen

Every 60 minutes, Monday to Sunday

Approximately 260 journeys per week from Dundee bus station

Within proposed LEZ route serves Trades Lane and Bus Station to East Port Roundabout section of Seagate

Operated by 9 x Euro 6 powered coaches dating from 2014

20/21 Dundee – Forfar – Kirriemuir / Brechin & Stracathro

Every 30 minutes, Monday to Saturday daytime, Every 60 minutes evening and Sundays

Some evening journeys operated under contract to Angus Council

Approximately 220 departures per week from Dundee bus station

Within proposed LEZ route serves Seagate, Commercial Street, Albert Square and Meadowside

Operated by 7 x Euro 6 hybrid double deckers dating from 2017

X26 Dundee – Cupar – Glenrothes – Dunfermline – Cumbernauld – Glasgow

Every 60 minutes, Monday to Saturday

Approximately 75 departures per week from Dundee bus station

Within proposed LEZ route serves Trades Lane and Bus Station to Westport section of Seagate only

Operated by 6 x Euro 5 powered coaches dating from 2011/12. Due for replacement during financial year 2020/21 by Euro 6 powered coaches

39/A Arbroath – Ethiebeaton – Dundee – Ninewells – Invergowrie – Kingoodie / Errol & Perth Royal Infirmary

Every 30 minutes, Monday to Saturday daytime. Limited evening & Sunday service

Evening and Sunday service operated under contract to Perth & Kinross Council

Approximately 350 departures per week from Seagate (not using Dundee bus station during ongoing closure of Trades Lane)

Within proposed LEZ route serves Seagate, Commercial Street, Dock Street, Crichton Street/Whitehall Street and Nethergate

Operated by 4 x Euro 5 double deckers dating from 2010 and 4 x Euro 4 single deckers dating from 2007

42 Dundee – Tayport – Leuchars – Strathkinnes – St Andrews

Every 30 minutes, Monday to Saturday daytime. Every 2 hours Sunday daytime

Approximately 170 journeys per week from Dundee city centre

Within proposed LEZ route operates in a one way loop covering Nethergate, Crichton Street, Dock Street, Trades Lane, Bus Station and Seagate to East Port Roundabout

Operated by 3 x Euro 4 single deckers dating from 2007/08

X54/54 Ninewells Hospital – Dundee – Newport/Tayport – Cupar – Glenrothes

Every 60 minutes Monday to Saturday. Every 2 hours Sunday

Evening and Sunday service operated under contract to Fife Council

Approximately 185 departures per week from Dundee bus station

Within proposed LEZ route serves Bus Station, Seagate, Commercial Street, Dock Street, Crichton Street/Whitehall Street and Nethergate. On return journeys to Glenrothes Commercial Street is omitted and Trades Lane served.

Operated by 4 x Euro 5 single deckers dating from 2014

57/A Dundee – Meigle – Alyth – Blairgowrie – Coupar Angus – Perth

Every 60 minutes Monday to Saturday, approximately every 2 hours evening and Sunday

Evening service operated under contract to Perth & Kinross Council

Approximately 100 journeys per week from Dundee bus station

Within proposed LEZ route serves Seagate, Commercial Street, Dock Street, Crichton Street/Whitehall Street and Nethergate

Operated by 6 x Euro 5 double deckers dating from 2012

X58 Dundee – Cupar – Leven – Kirkcaldy – Dalgety Bay – Edinburgh

Every 60 minutes Monday to Sunday daytime

Approximately 100 journeys per week from Dundee bus station

Within proposed LEZ route serves Trades Lane and Bus Station to Westport section of Seagate only

Operated by 6 x Euro 6 powered coaches dating from 2015

59 Dundee – Coupar Angus – Blairgowrie

Every 60 minutes Monday to Saturday daytime, every 2 hours Sunday

Approximately 70 journeys per week from Dundee bus station

Within proposed LEZ route serves Seagate, Commercial Street, Dock Street, Crichton Street/Whitehall Street and Nethergate

Operated by 2 x Euro 5 double deckers dating from 2010

73 Ninewells – Dundee – Monifeith – Carnoustie – Arbroath

Every 10 minutes weekdays, every 15 minutes Saturdays, every 20 minutes Sundays and every 30 minutes evenings

Some evening journeys are operated under contract to Angus Council

Approximately 1,000 journeys per week from Seagate

Within proposed LEZ route serves Seagate, Commercial Street, Dock Street, Crichton Street/Whitehall Street and Nethergate

Operated by 18 x Euro 6 hybrid double deckers dating from 2015

75 Dundee – West Ferry – Broughty Ferry – Grange Road - Ethiebeaton

Every 60 minutes Monday to Friday only

40 journeys per week from Dundee city centre

Within proposed LEZ route serves Seagate, Commercial Street, Dock Street, Whitehall Street, High Street, Crichton Street and return via Dock Street, Commercial Street and Seagate

Operated by 1 x Euro 5 single decker dating from 2009

77 Dundee – Newport – Wormit – Gauldry

Every 60 minutes Monday to Sunday

Evening journeys operated under contract to Fife Council

Approximately 110 journeys per week departing Dundee city centre

Within proposed LEZ route operates in a one way loop covering Nethergate, Crichton Street, Dock Street, Trades Lane, Bus Station and Seagate to East Port Roundabout

Operated by 2 x Euro 4 single deckers dating from 2007

99 Dundee – Leuchars – St Andrews

Every 7/8 minutes Monday to Saturday , every 15 minutes Sundays, every 20 minutes evenings

Approximately 600 departures a week from Dundee city centre

Within proposed LEZ route operates in a one way loop covering Nethergate, Crichton Street, Dock Street, Trades Lane, Bus Station and Seagate to East Port Roundabout

Operated by 15 Euro 6 micro hybrid single deckers dating from 2018

139 Inveraldie – Tealing – Dundee

One journey Monday to Fridays

Operated on behalf of Angus Council

Within proposed LEZ route serves Seagate, Commercial Street, Dock Street, Whitehall Street

Operated by 1 x Euro 4 minibus dating from 2008

202 Kirkton – Downfield – Law – City Centre

Every 60 minutes Monday to Saturday daytime

Operated wholly under contract to Dundee City Council

42 departures per week from the city centre

Within proposed LEZ route serves Victoria Road, Bell Street, Meadowside, Panmure Street, Meadowside and Ward Road

Operated by 1 x Euro 4 minibus dating from 2008

XPlore Dundee

Xplore Dundee is broadly in favour of a Low Emission Zone in Dundee city centre, one which will help to mitigate the emissions emergency we are currently facing. We would encourage Dundee City Council to make the most of this opportunity and take ambitious action not only to improve the environment in our most polluted areas, but also to tackle congestion, a problem which goes hand in hand with air quality issues.

As the city's principal public transport provider, we are already investing heavily to reduce our carbon footprint, and we insist that we are uniquely equipped and poised to help the city achieve its overall ambition to improve air quality. The statistics show that buses are already five times more environmentally friendly than diesel cars. If modal shift were encouraged and passenger capacity maximised, buses could be almost ten times less toxic - and that is even before factoring in developments in clean bus technology, which Xplore Dundee is actively embracing.

A key point is that we will never fix the air quality crisis if we don't tackle the congestion crisis first. Xplore Dundee can do its part - and we pledge that we will; buses are the best way to curb congestion and manage emissions. The average car carries just 1.2 passengers whereas a double-deck bus has space to seat 74. That is the potential equivalent of taking 60 cars - and their fumes - off our roads.

We want to work with the authorities on this initiative because we want it to work for Dundee. We want the best possible future for this city and its people and we fully acknowledge our key role in this task, provided our efforts are not hampered by restrictions which could compromise the overall success of this important initiative.

In the following consultation response we will outline our position on Dundee City Council's LEZ proposals and our suggestions for how to maximise this opportunity for the benefit of all concerned.

Xplore Dundee believes the LEZ should include cars and other vehicles types (HGVs etc) for the following reasons:

- The city council's own modelling shows that a bus-only LEZ would leave many of the most polluted areas in the city with emissions levels which still exceed legal limits.
- The modelling further shows that even including cars leaves some areas within the margin of error. Therefore, there doesn't just need to be cleaner cars on the road, there needs to be

fewer vehicles overall. Maximising the capacity of the public transport network provides a means to do this.

- Additionally, we would assert that the options of excluding the car parks should not be considered if the issues of air quality and congestion are to be taken seriously. Removing car parks from the intended LEZ will mean there is no incentive for car owners to leave their vehicle at home and choose the bus or another means of sustainable transport.
- Including cars in LEZ is an effective means to encourage modal shift and could prove to be a single solution to multiple issues - tackling not just air quality & congestion, which we believe is a problem which goes hand in hand with pollution.
- A bus-only LEZ puts the onus disproportionately on buses to take action; buses make up 2% of traffic and move 15% of the population but are expected to do 100% of the work in one of the options being considered
- We believe the bus station should be included in the LEZ plans; as this would mean all bus companies operating within the city centre are treated on a more equal footing.

Congestion - this is a problem which urgently needs to be addressed, and it would be a missed opportunity not to introduce measures with the LEZ which would make some progress in reducing traffic levels in the city:

- Dundonians spend a bigger share of overall journey time (7.1%) stuck in traffic than Glaswegians (5.9%), per INRIX city traffic scorecard 2016 Emissions are 4x higher in congested conditions than in free-flowing traffic
- 75% of congestion caused by excess traffic, per TomTom Traffic Index 2016, and urban traffic speeds are falling by 2% annually, per DfT

Bus operators should be given a substantial grace period to convert as much as possible of the fleet to low emission:

- The legal requirement of LEZ is accelerating the need for investment in new buses and means companies such as ourselves are introducing new vehicles before the natural 'life cycle' of our buses has been reached. There is significant investment required to meet the requirements for an LEZ and a short grace period would risk heavy costs leading to increased fares or possible service cuts – directly defying the goal of reducing traffic and encouraging more public transport use. It is undoubtedly the right thing to aim to achieve but there is a commercial reality to achieving it within reasonable timeframes.
- For reference, below is the timeline for fleet improvement currently undertaken by Xplore Dundee:

Date	Notes	Quantity	Cum. Total
Summer 2013	First batch of Euro V electric hybrids	9	--
August 2015	New batch of Euro V electric hybrids	5	--
December 2018	First batch of Euro VI Emeralds	14	14
February 2019	BEAR 1 Euro VI retrofits (double decks)	7	21
May 2019	Euro VI Enviro200s swapped in	3	24
December 2019	Second batch of Euro VI Emeralds	9	33
December 2019	BEAR 2 Euro VI retrofits (single decks)	10	43
Spring 2020	More Euro VI Enviro200s swapped in	9	52

This will be followed up by significant further investment by Spring 2021.

We believe the plans for a Low Emission Zone in Dundee are a significant step forward, but on their own they won't encourage modal shift - getting more people out of their cars and choosing active travel methods (cycling, walking, bus) - which is the goal of the city council and Scottish Government as outlined in the National Transport Strategy and Programme for Government. We're aware that the city council is identifying projects to move even closer to these aims and hope to see progress in this area which will complement the LEZ.

Xplore Dundee, and the bus industry as a whole is already playing a significant role in encouraging modal shift: the introduction of mTickets, contactless payment, top-spec vehicles with WiFi, extra legroom, USB charging etc. and ongoing ticket promotions and special offers are regularly undertaken to attract more customers onto the bus, thereby reducing traffic and the level of pollution from private cars. We also continually work in partnership with Dundee City Council to deploy grant funding effectively on projects such as ABC and the Holiday Hop, which allows multi-operator travel and heavily discounted kids tickets during holiday periods.

Not only this, but in areas like Lochee Road, which records some of the highest levels of pollution in the city and in Scotland, we are going the extra mile to ensure we are actively improving this environment: by the end of 2019 every bus in service on Lochee Road will be a low-emission vehicle. Ten buses which have been retrofitted using BEAR 2 funding so that their engines are Euro VI compliant are set to be introduced onto Service 28/29, joining seven others which have already been upgraded. We would note that the proposed boundary of the LEZ does not include Lochee Road, despite this thoroughfare being the fourth most polluted in Scotland (due to its geography and the 'canyon effect' trapping emissions). In addition to the actions we are already taking, we would suggest that this element requires further thought from Dundee City Council.

Xplore Dundee welcomes the Scottish Government's recently announced Programme for Government and its plans to distribute significant funding for planned transport infrastructure improvements. We believe the LEZ, if executed effectively, will provide a good foundation for long-term solutions such as priority measures for buses, improved stops, refurbishment of the Ninewells Hospital interchange and other mooted ideas such as a Park & Ride facility to reduce congestion in the city.

We would encourage Dundee City Council to be ambitious with this project and in its future plans to improve air quality; we understand the proposals outlined here are the first step in a long-term process, however the minimum changes outlined will barely move the dial in reducing pollution in the city centre and, in fact, may mean that air quality will not drop below the accepted levels. We have to

ask: what would be the point in introducing changes which would do so little to solve this chronic problem? In the view of Xplore Dundee, infrastructure changes or adjustments to traffic flow would be required to achieve the targets set; we recognise there are plans to take these crucial steps and would like to see these accelerated and introduced as quickly as possible in order to maximise the effectiveness of the LEZ proposals.

Summary

Xplore Dundee is ready and willing to embrace a Low Emission Zone, as a significant and important measure to improve our air quality - but we want to see it achieve even more than this - reducing congestion, encouraging modal shift and active travel, and paving the way for a city which embraces public transport as a safe, efficient, good value and healthy way to move around Dundee and the surrounding area.

This Low Emission Zone for Dundee could be the beginning of a transport revolution - the first steps towards a significant societal shift - and we would urge Dundee City Council to grab the chance with both hands and to make ambitious changes for our city's future.

Confederation of Passenger Transport

The Confederation of Passenger Transport UK (CPT) is the trade association for the bus and coach industries. We represent the operators of local bus services that account for over 90% of the registered bus mileage in Scotland. CPT is the recognised voice of the industry in discussions with the Scottish Government on relevant policy matters. CPT also provides operational guidance to our members to help ensure compliance with current legislation and to keep members informed of relevant future legislative changes.

Overview

CPT broadly supports the proposed introduction of a Low Emission Zone (LEZ) by Dundee City Council, in order to address the environmental and health challenges posed by NOx emissions in Dundee city centre. We hope that the council will also take the opportunity, as part of this exercise, to not only improve the environment in the most polluted areas, but to tackle congestion, which clearly has a significant negative impact on the city's air quality, as well as bus service punctuality and reliability - key demands of existing and much hoped for new bus and coach users.

Given the knowledge and understating that local operators of bus and coach services in and around Dundee have regarding local operating conditions, we are content to allow them to indicate their preferred options choices.

In our view, bus and coach have a key role to play in helping to change and improve the city centre, providing benefits to both residents and visitors to Dundee. Clearly, the offer and promotion of a city centre which is environmentally friendly, congestion free and promoting all forms of sustainable travel, whilst also actively discouraging car use, can only be beneficial in attracting more visitors to the city centre.

Key points to consider

- I. Whilst individual operators of bus and coach services will indicate their preferred option choices, CPT believes that it may be helpful to continue to provide access for buses and coaches to access the bus station - similar to the approach adopted in the Glasgow LEZ.

- II. It is clear from the report produced by Systra, (Dundee Low Emission Zone), that a bus-only approach to address emissions would fail, leaving several of the most polluted areas in the city with emission levels which would still exceed legal requirements. This suggests that it is imperative that the option chosen must include all vehicle types in order to achieve the required outcomes.
- III. In addition to item II above, it is clear from Systra's work, that even with the inclusion of all other vehicles, some areas would still remain within the margins of error, which clearly indicates the need to also consider other options as part of the LEZ, which can help reduce traffic volumes within the city centre, perhaps freeing up space to provided additional bus passenger priority measures, thus encouraging greater use of bus and coach services.
- IV. Given the scenario's outlined above, we feel that the suggestion to exclude car parks is counter-intuitive to what the LEZ is trying to achieve and will do little to encourage modal shift to more sustainable modes.
- V. We understand the requirements placed on Local Authorities to have LEZ's in place by the end of 2020, however, we would urge that bus and coach operators are given a sensible period in which to replace and/or convert their vehicle to meet the required standards. Issues here include the following:
 - a. The requirements that vehicles will have to meet to allow them to be operated within LEZ's are well known now and will require, in some cases, earlier investment in new vehicle purchases, with other vehicles requiring conversion work to be done, to reduce emissions to levels to meet legal requirements.
 - b. In the absence of committed Scottish Government financial support beyond 2019 for vehicle retrofitting, combined with the risks associated with a short lead-in time, significant additional investment will have to be made by operators, ahead of their normal planned fleet investment.
 - c. Some operators may find this to be unaffordable, which may see them leave the industry, whilst others faced with having to take on these additional costs, may have to look at covering them by increasing fares and/or possible service reductions.
 - d. Both scenarios outlined in 'c' above would have a very negative impact on encouraging modal shift to bus and coach use. Whilst it is clear to operators that the objectives and requirements of a LEZ are commendable, it clearly requires a sensible lead-in time to allow them to both update and change their fleets to meet the key LEZ requirements.

Summary

Buses and coaches have a crucial role to play in tackling environmental issues and helping local authorities meet Scottish Government targets on improving air quality and reducing carbon. However, given the right operating conditions they can also help in so many other ways, such as:

- mDriving urban prosperity
- Helping to build stronger communities
- Improving mobility through innovation
- Reducing carbon emissions
- Connectivity and employability
- Social inclusion and accessibility
- Improved health through the growth of sustainable and active travel

Given the appropriate operating conditions bus and coach can play a vital role in helping in all these areas. However, it is clear from the work undertaken by Systra that a bus-only approach to addressing emissions issues in Dundee would fail to address matters fully. Transport emissions are the largest component of pollution loadings in urban areas, reducing the number of vehicles is

central to progress, as is both the promotion of active and sustainable options and the inclusion of all polluting vehicles in LEZ's.

With respect to air quality, behaviour change should not be a "nice to have" or just an aspect that should be "encouraged". We cannot wait for the next technology fix to come along. Energy consumption and emissions from transport are influenced not only by technical efficiency, mode choice and the carbon/pollutant content of energy, but also by lifestyle choice and socio-cultural factors.

We would urge Dundee City Council, if they are sincere about their aspirations for improving the city centre for the benefit of their residents and visitors to the city, to be bold and brave in introducing their Low Emission Zone, where the most likely pathway to success will involve changes to travel demand patterns, as well as appropriate technological improvements. In many cases policies to change travel demand patterns can be implemented sooner, and will impact more significantly, to achieve the necessary emissions reduction.

Let's all work together in partnership to deliver a city centre in Dundee that has improved air quality, congestion free streets, greater levels of sustainable travel, i.e. walking, cycling and public transport, an enjoyable, healthy and economically vibrant environment that the cities citizens and visitor can truly enjoy.

Freight Transport Association

Summary of FTA View

- The benefits of CAZs will be short-lived. The Euro VI/6 vehicles that will be required, will enter the vehicle fleet on their own accord as part of the natural fleet replacement cycle.
- CAZs are not cheap for cities to implement. Instead, we believe that money could be better invested in measures which will enable those who can to make changes to their fleet or operations rather than penalising those who can least afford to buy replacement vehicles. And the benefits from these measures will last far beyond the time-limited ones that a CAZ may provide.
- Where a CAZ will be unavoidable for reasons of legal compliance with EU targets, there are approaches to CAZs that can at least minimise the impact on local businesses, without negating the temporary air quality benefit they are supposed to have. For Dundee:
 - The size of the proposed zone should be scaled back to focus on the city centre. FTA is comfortable with the size of the zone proposed by Dundee City Council. The bigger the zone, the more businesses that are likely to be caught up in it, not just for deliveries, but to get vehicles out of their yard, requiring a 100 per cent compliant fleet.
 - Vans should not be included unless essential as they had a later introduction date for Euro 6 and therefore the second-hand market has not had time to establish.
 - The daily charge for HGVs should be set to the same levels as other cities in Scotland
 - Vehicles accessing ATF sites and test facilities should be provided with an exempt route.
 - A limited sunset clause should be offered for operators based within (or who primarily operate within) the zone who may need more time to meet the requirements.

- FTA encourages DCC to source and supply financial support from the UK Government's Clean Air Fund for those businesses, operating commercial fleets, in and around Edinburgh, that are going to struggle to cope with the financial implications to their operations due to these proposals.

About FTA

The Freight Transport Association (FTA) is one of Britain's largest trade associations, and uniquely provides a voice for the entirety of the UK's logistics sector. Its role, on behalf of over 18,000 members, is to enhance the safety, efficiency and sustainability of freight movement across the supply chain, regardless of transport mode. FTA members operate over 200,000 goods vehicles - almost half the UK fleet - and some one million liveried vans. In addition, they consign over 90 per cent of the freight moved by rail and over 70 per cent of sea and air freight.

FTA's mission is to make logistics safer, cleaner and more efficient. We seek to ensure that our members can supply our towns and cities with the goods they require every day, whilst reducing any social impacts – including air pollution. As information about the health impacts of some atmospheric pollutants has grown, the issue of lowering local air quality emissions has risen in its importance. The logistics industry accepts that emissions need to reduce compared to their historic levels.

Background

FTA welcomes, and would like to draw attention to, the progress that has been made in making new diesel vehicles significantly cleaner than their recent predecessors and look forward to the substantial improvement in air quality this will bring.

We also particularly welcome the acknowledgement of the success of the Euro VI standard for heavy duty vehicles. Whilst there are continuing concerns over the performance of Euro 6 cars, we must not allow these issues to obscure the successes of the Euro VI requirement.

However, the benefits of CAZs will be short-lived. The Euro VI/6 vehicles that will be required, will enter the vehicle fleet on their own accord as part of the natural fleet replacement cycle.

CAZs are not cheap for cities to implement. Instead, we believe that money could be better invested in measures which will enable those who can to make changes to their fleet or operations rather than penalising those who can least afford to buy replacement vehicles. And the benefits from these measures will last far beyond the time-limited ones that a CAZ may provide. Details of these measures are explained in more detail in the Cleaning the Air briefing note which is appended to this response.

Where a CAZ will be unavoidable for reasons of legal compliance with EU targets, there are approaches to CAZs that can at least minimise the impact on local businesses, without negating the temporary air quality benefit they are supposed to have.

FTA is responding to this consultation in the form of a written declaration rather than answering the specific questions laid down in the response document. The Association is neither an employer nor an operator of vehicles within Dundee but does represent the views of our member companies, established through our democratic structure, so it is highly appropriate that a written response is submitted for your consideration.

Response to consultation

FTA recognises that Dundee city council is obligated by law to model a charging CAZ and has to take decisions that will have serious implications for businesses and citizens that find themselves within the proposed boundary zone and also for those who find themselves around the periphery but are required to operate within the zone.

When making fleet purchasing plans, businesses do not only consider the initial purchase price, but also the period over which they will operate that vehicle (typically five to seven years for HGVs, but more specialist and low mileage vehicles may be 10-12 years), and the residual value of the vehicle when they replace it. Residual values for Euro V/5 trucks and vans are now far lower than initially anticipated due to proposals for Clean Air Zones across the UK and many are being forced to upgrade their vehicles sooner than planned which is also adding to budgetary pressures. In addition, some operators may be locked into lease plans which would be difficult and expensive to get out of early.

For van operators that are registered within the CAZ, there is a potential double economic impact on their operations. Firstly, Euro 6 for vans was only introduced on 1 September 2016. This gives a vehicle market of only (4 years and 4 months) should the CAZ go live on Jan 2021 – although exact date has not yet been proposed. This is not sufficient time to for a second-hand market to have established, meaning local businesses having to buy new vehicles to avoid the charge. Secondly, setting the CAZ framework at Euro 6 means the residual asset value of their Euro 5 vans has significantly depreciated and they are unable to recover as much value at resale as they were able to in the past.

Timings

If operators placed an order for a new Euro VI truck today, the lead time on the vehicle could be up to 12 months between placing the order and that vehicle being operated on the road. For vehicles which require after-market alterations and fitment of additional equipment, this lead time is likely to be significantly longer.

Euro VI has been a requirement for HGVs since January 2014, whilst for vans the Euro 6 requirement did not come into force until September 2016. We can expect many operators will have substantially pre-Euro 6 van fleets in early 2021 – especially those smaller operators who utilise second hand vehicles.

Location and size of zone

The size of the zone should be as small and targeted as possible to reduce the number of businesses and operator affected. Expanding the zone beyond the city centre will significantly increase the cost of doing business in Dundee. This could have severe consequences and some businesses may choose to relocate, taking jobs with them.

Penalty Charge Notice (PCN) level and consistent enforcement systems across the UK and Scotland

FTA and the Scottish Government are seeking harmonisation across all the proposed LEZs within the four cities of Scotland. FTA is aware that Transport Scotland has been working on guidelines for LEZs, as part of the Transport Bill. FTA urges DCC to follow the guidelines within the Transport Bill and takes a consistent and proportionate approach to enforcement.

Retrofit

The *Clean Vehicle Retrofit Accreditation Scheme* (CVRAS) is operated by the Energy Saving Trust (EST). There may be companies which claim they can provide a solution, but such devices must be approved by the EST. Whilst there are several accredited retrofit systems for buses to enable their emissions meet the Euro VI standard, it must be noted that, apart from one system which can be used on some refuse collection vehicles, currently there is no accredited retrofit option for HGVs to

bring Euro IV or V vehicles up to the Euro VI standard. Due to the technical requirements of Euro VI, if such an option were to be available for HGVs it would likely cost in the region of £15,000 to £20,000 per vehicle and, therefore, would only be potentially viable to operators of specialist high-value vehicles. For operators of 'standard' HGVs, any retrofit device which may be brought to market is unlikely to be cost effective and consequently will not be a compliance option for them. Therefore, for most operators, the only option is to replace the entire vehicle.

Exemptions and sunset periods

Support should be offered for operators based within or on the periphery of the zone, particularly small businesses and specialist fleets. Their ability to move vehicles elsewhere in the UK will be diminished with the introduction of CAZs in other towns and cities, and many may not trade in other areas and therefore this would not even be an option. Such businesses should be designated exempted routes out of the zone for non-compliant vehicles.

In addition, consideration should be given to companies operating specialised vehicles which are built for a very specific purpose and are likely to do limited mileage, and therefore have a normal working life in excess of the norm (for example fine art transportation, film and TV units and music concert equipment lorries). Exemptions should be provided to a limited number of such operators to prevent significant business impact for limited environmental returns.

Financial impact

FTA understands that the Scottish Government has set aside funding for the four cities in Scotland, which are looking to implement and develop LEZs. However, we remain concerned that a lot of information on financial support for industry appears to be around the retro-fitting of buses.

The UK Government's Clean Air Fund provides a mechanism for local authorities to bid for funding to support operators affected by the CAZ. Leeds, for example, has secured £23 million to help businesses based within (or who primarily operate within) their CAZ boundary. Operators of non-compliant HGVs, non-scheduled buses or coaches will be able to apply for up to £16,000 in grant funding which can be used to:

- Purchase a Clean Vehicle Retrofit Accreditation Scheme (CVRAS) accredited retrofit solution from a recognised supplier, should such a system exist.
- Pay lease agreement exit fees to replace a non-compliant vehicle with a compliant vehicle.
- Put towards the cost purchasing a new or second-hand compliant vehicle

FTA calls upon Dundee City Council to lobby the Scottish Government for similar funding to help support local businesses and operators of commercial vehicles who will be impacted by the Dundee LEZ proposals.

UPS

Background

UPS is one of the world's largest logistics companies, playing a vital role in the collection, warehouse and delivery of goods. Our UK operation includes more than 50 operating facilities, approximately 8,900 employees and a fleet of more than 2,900 vehicles. UPS provides critical national and international time sensitive delivery services for businesses of all sizes and the express sector contributed £2.3bn to UK GDP in 2010, and transports £11bn of UK exports a year. UPS operates a delivery depot at Unit 7, Noble Road, Wester Gourdie Industrial Estate, Dundee, DD2 4UH. This depot provides delivery and collection of small packages and documents to businesses and consumers in the Dundee area.

Dundee Clean Air Zone

In general, UPS supports objectives to improve air quality in the city. UPS is committed to improving air quality and is also working on solutions for reducing congestion which are detailed below. However, we would urge local authorities to understand the challenges commercial fleets currently face regarding vehicle availability, grid capacity and final mile delivery (amongst others) and that any restrictions are balanced with the recognition of the importance road freight plays in the city by providing critical delivery and collection services for businesses and consumers in the Dundee area.

Commitment to Reducing Environmental Impact

We take our environmental footprint extremely seriously. We continually work to minimise the miles we travel and strive to increase the energy efficiency of our transportation network, regularly monitoring our carbon footprint and investing in low and zero carbon technologies such as electric vehicles and liquefied natural gas HGVs. This is all part of our effort to reduce absolute emissions across our global ground operations by 12 percent by 2025 – which means that even as our business grows and delivery volume increases, our overall emissions will decrease. We also have a target to have 25% of total vehicles purchased annually around the world to be alternative fuel or advanced technology vehicles by 2020.

Transitioning to Electric Vehicles

UPS currently operates a fleet of approximately 69 electric vehicles (making us one of the largest single users of electric vehicles in central London), with plans for further investment. We first introduced electric vehicles in London in 2008. Since then one of the key challenges has been cost effective electric vehicle availability. This is not currently provided by the market as most EV's are up to three times the cost of an equivalent diesel vehicle. As a result in the last 10 years we have developed a diesel to electric conversion with EFA-S (a company in Germany), learnt how to deploy e-assist cycle solutions in dense areas, worked with Tevva on a diesel to range-extended electric conversion solution and most recently with Arrival on the development of a brand new design of EV. But still the problem persists. We think that in the next three to five years this problem will be overcome through the efforts of ourselves and others to innovate in this space but we would urge local authorities to recognise the pace at which low emission zones are introduced in the city to ensure commercial fleets are able to comply given the cost and availability of low emission vehicles.

Range Extended Electric Vehicles

We have also been introducing range extended, electric vehicles into our fleet in 2019. These vehicles contain a small diesel engine which allows the vehicle to operate electrically over longer distances by re-charging via the diesel engine when needed. These vehicles have geo fencing technology that ensures the vehicle is operating in electric mode if it enters a LEZ without the need for driver intervention. We would also ask that these vehicles are considered compliant within the LEZ.

Last Mile/E- Cargo Bikes

At UPS we are utilising different concepts for cycle logistics which are aimed at reducing traffic congestion and emissions associated with urban package delivery. We are currently using cargo bikes in Dublin and in several cities across Europe.

The challenge with cycle logistics generally is that we are limited by the capacity of the cargo bikes to carry sufficient volume of packages to make the delivery system viable. As a result, we look to place a large container (or "eco-hub") in a "staging area" within a city centre location that would allow the handler (or handlers) to continually refill the cargo bikes throughout the day and carry out final mile deliveries. In Dublin, the container is placed above ground on a pedestrianised city street. In London, given much denser and crowded streets, we have investigated other locations to place the containers such as under-utilised underground car parks.

In UPS' experience, we have found that space being available for city centre container staging, e-tricycle parking and charging availability to support sustainable final mile deliveries, have all proven to be challenging but crucial in ensuring we can, on a practical level, carry out our operations in a sustainable and commercially viable manner.



London

Dublin

Electrifying the Fleet – Grid Capacity

At UPS, our goal has been to move towards electric vehicles in urban locations. The challenge we have faced with expanding our electric fleet is in not having enough grid capacity for charging these vehicles simultaneously at peak times in the evening. It is not feasible to charge the vehicles during the day as they are on the streets carrying out multiple deliveries with only minimum time spent at each location. As a result, we worked closely with UK Power Networks (UKPN) and a three tier system of landlords to update the site's grid capacity at our Kentish Town depot, at considerable expense, and are now able to charge all the EVs at once, including during peak time. While this investment has been hugely successful, a recent report from FREVUE (a European project funded by the EU's Seventh Framework Programme for research, technological development and demonstration) highlighted the fact that UPS was required to make an investment in a UKPN asset without control over its operation. Additionally, UPS is a global operator but for smaller operations this type of investment may be out of reach, which prohibits the uptake of electric vehicles.

SMART Grid Technology

In addition to the conventional grid upgrade that we undertook, UPS worked with a consortium to deploy a radical new technology solution with the potential to dramatically reduce the cost of recharging a fleet of electric vehicles. Recharging a fleet of electric vehicles can be rendered cost-prohibitive by the need for expensive external power grid reinforcement work. To overcome this, the consortium, which comprises UPS, UK Power Networks and Cross River Partnership, has commissioned a combined smart-grid and energy storage system at the UPS operation in central London. The initiative was supported financially by the UK's Office for Low Emission Vehicles. It has had the immediate effect of raising the number of 6-7.5 tonne vehicles that can be recharged simultaneously overnight from the electricity power supply available at the site from 65 to the whole 170 fleet without any further external grid reinforcement work.

Believed to be a world first to be operating live at this scale and combining both smart-grid and energy storage technologies, the intention of the consortium is to produce a strategy for how the solution could be used in other UPS facilities and beyond to electrify fleets cost-effectively. UPS believes the day is rapidly drawing closer when the cost of an urban distribution electric vehicle, including the necessary power supply investments, will be lower than that of its diesel counterpart. This breakthrough will be instrumental in enabling electric vehicles to be deployed in scale in the world's cities, itself an essential component of tackling the air quality challenges that those cities face.

Grace Period

We welcome proposals to provide a grace period for commercial vehicle operators. Businesses need certainty in order to plan and the vehicles we are ordering today, will be in our fleets in 10-15 years'

time. The more time and certainty we have to plan, the more low emission options we can bring into our fleet.

We would also urge for financial support for companies in transitioning to low emission options, especially for electric vehicles and the corresponding infrastructure required. It is our contention that a lack of grid capacity is preventing private companies from investing in electric vehicles, inhibiting the ability of cities across the UK to achieve its goal of cleaner and more sustainable vehicles.

Take up of electric vehicles by the private sector is crucial to improving air quality in urban areas. For example, UPS's electric vehicles are significantly more carbon efficient than their diesel equivalent well to wheel. Replacing diesel vehicles with electric vehicles saves around 1.9 tonnes of CO2 and 181kg of NOx per vehicle per year. Therefore, UPS would urge local authorities to consider how increased uptake of commercial electric vehicles can be supported, especially through addressing energy supply constraints.

Daily Penalty Rate

We would urge Dundee to set the level of the daily penalty for non-compliant vehicles at the same level as has been set in other cities (such as Leeds and Birmingham) at no more than £50. Commercial vehicles play a significant role in providing support to businesses and they need to continue serving their customers.

Alignment with other Local Authorities

Finally, as a national fleet operator it potentially will be a logistical and administrative challenge to navigate the multiple clean air zones that will be introduced around the UK. We would urge Dundee to work with other local authorities around the UK to push for a nationwide policy on intercity charging that would see vehicles only charged once per day regardless of the number of Clean Air Zones/Low Emission Zones that were entered. Also, we are happy to see that a centralised payment system is being developed (though currently delayed) at minimum for which we believe is key to lessen the administrative burden this will be place on national fleet operators.

Summary

In general, UPS supports the proposals related to Dundee's aims to improve air quality in the city. We would also urge the local authority to consider some of the challenges commercial fleet operators such as ourselves are faced with and look at other innovative ways of ensuring the feasibility of sustainable delivery and logistics including:

- Provide funding and support to companies wanting to electrify their fleet and invest in grid capacity and/or develop and deploy Smart grid technology which will allow the charging of vehicles overnight in a cost effective way.
- Ensure range extended, electric vehicles are considered compliant and not liable to a charge.
- Look at making space available for city centre container staging, e-tricycle parking and charging availability to support sustainable final mile deliveries.
- Review the level of penalty imposed to ensure road freight companies are not unduly penalised for carrying out a significant role in supporting Dundee businesses.
- Work with other local authorities to push for a nationwide policy on intercity charging that would see vehicles only charged once per day regardless of the number of Clean Air Zones/Low Emission Zones that are entered as well as a centralised payment system (which we understand is being developed) to lessen the administrative burden this will place on national fleet operators.

Dundee Civic Trust

Dundee Civic Trust welcomes the steps proposed by Dundee City Council to establish a Low Emission Zone in central Dundee. The Council is to be congratulated on moving forward with plans which will help to counteract the "climate emergency" declared by the Scottish Government. It is a major step forward in improving air quality in the city centre. The Trust has previously commented upon the poor environment in Seagate and elsewhere.

We support the proposal for the area within the Inner Ring Road, but probably not including, in the restricted area, the Inner Ring Road itself. If it were to be included, affected traffic would surely find routes through nearby residential areas.

In light of the consultants' report we believe that a phased introduction would be both appropriate and sensible, as it would allow suitable adjustment and planning.

Some factors must be considered:

First, scheduled bus services should be compliant, as they are the most polluting vehicles on account of their large numbers, and the age of many of them. The effect should be monitored over the following three years.

Second, additional time should be given to school/community/charity bus/minibus owners and car hire companies to achieve compliance: this will mitigate costs and ensure a cost effective hire market.

Third, once the effects of the bus restrictions have been measured, if non-compliant cars are to be restricted we support the model which offers access for all vehicles to the many car parks which lead off the inner ring road. This should limit displacement parking in the surrounding residential areas, and allow the maximum access to the inner city on foot.

Fourth, consideration will have to be given to imposing restrictions on taxi cabs, some of which can be serious polluters. It is accepted that this may have to be phased in over a number of years as vehicles are replaced

Fifth, and in common with other Low emission Zones, heritage vehicles should be exempt from restrictions.

Sixth, the effect on businesses inside the area should be considered and monitored with care. Some may well be adversely affected, and concerned comments have already been made to the Trust about this. The proposed restrictions have the potential to put still further economic pressure on High Street areas.

Finally, in relation to both the whole of the inner area and additional hotspots in Lochee Road and elsewhere, we would encourage the City Council to increase suitable tree planting significantly. This has been shown to improve air quality as well as the aesthetic quality of the built environment.

Dundee Resource and Re-use Centre

Headline statement: our individual freedoms have come at the cost of severe if not terminal environmental damage, fracturing world peace and damaging the health of each and every one of us. We need very focussed consensual leadership to turn this round: political parties and all

stakeholders must work together to rise to the challenge of our climate and environmental emergency

Our starting point is to quote from one of the most authoritative voices in the field of vehicle emissions quoted in the source whose link is as follows:

<https://www.fleetnews.co.uk/news/fleet-industry-news/2019/05/01/rde2-compliant-cars-help-diesel-to-hit-back>

Nick Molden, Co-Founder and CEO of Emissions Analytics, Co-Founder and Director of the AIR Alliance makes these comments:

“Good though they are, these RDE2 vehicles (the latest standards set to come into force next year) will not be enough to solve urban air quality problems.

Why? At the same time as these RDE2 vehicles are on sale, for the next six months there will still be new diesels available legally emitting 400mg/km and more – all labelled Euro 6.

As Euro 6 has been in place since 2014, the number of pre-RDE Euro 6 diesels on the road will dwarf the number of RDE2 vehicles for years to come.

The solution is to address the dirty Euro 6s already on the road. To enable this, genuinely independent ratings are required to compare vehicles of all types and ages, not just piecemeal self-certification by manufacturers. In that way, more targeted and efficient procurement and city access policies can be set.”

Trying to piece together a body of evidence which undermines the veracity of the emissions estimates in the Systra report is a daunting task, as the history of attempts to achieve emissions reductions is littered with the so far successful efforts of manufacturers to thwart, evade and blatantly cheat their way out of compliance

Here below is a collection of quotes re vehicle testing:

Difference between official emissions figures and real-life driving pollution (from Which?)

eg “Nissan Qashqai, 1.6-litre (2014-): emits 0.99g/km of NOx A top-selling car, it chugs out so much NOx that it also wouldn’t meet Euro 1 standards”

Real Driving Emissions (RDE) introduced in April 2016 after it became clear that the laboratory tests were inadequate, because diesel cars were emitting much more NOx on the road than in lab tests.

Since 2015 most diesels were exceeding the official NOx limit of 80g/km. The current RDE test limit is 160g NOx/km, double the official limit. From 2020 it will be 1.4 times the official limit though many of the latest new vehicles (Mercs and JLR’s) are down as low as 20-40mgNOx/km (Diesel is not all bad!)

“If you're in the market for a brand-new **car**, it might be **worth** waiting until 2020, when you can reliably trust that your new **diesel car** will meet emissions standards.(15 Feb 2019)

<https://www.which.co.uk/reviews/new-and-used-cars/article/air-pollution-and-car-emissions/cars-that-produce-the-most-nox>

in Which's latest tests, despite diesel becoming generally cleaner in recent years, diesel engines still produce an average of 11.5 times the amount of NOx compared with petrol cars

SUV's the biggest culprits

https://www.theguardian.com/environment/ng-interactive/2019/oct/25/suvs-second-biggest-cause-of-emissions-rise-figures-reveal?utm_term=RWRpdG9yaWFsX0dyZWVuTGlnaHQMTkxMDI4&utm_source=esp&utm_medium=Email&utm_campaign=GreenLight&CMP=greenlight_email

No safe limits for PM's.

<https://www.theguardian.com/environment/2019/sep/17/air-pollution-particles-found-on-foetal-side-of-placentas-study>

Exposure to fine particulate matter (PM2.5) is the biggest global risk factor for early death, according to the 2019 Lancet Countdown report.

Summary: There is a considerable body of evidence from AQ News, Which?, Client Earth which point to the inadequacy of the lab testing regime that car makers use for assessing emissions from new vehicles. Real life testing reveals large differences so the estimates that the NMF reaches for diesel emissions are significantly understated

There should be city wide provision of A/Q monitors eg DiY A/Q monitors (Makerspace)

Reducing emissions

Article by Prof David Begg: <https://www.transporttimes.co.uk/news.php/Why-the-Euro-VI-bus-is-essential-to-the-success-of-Clean-Air-Zones-238/?s=magazine>

Nottingham has just persuaded Govt that it doesn't need an LEZ as other measures will achieve better results, cheaper, faster! Eg Retrofitting to Euro VI standard costs £15k per bus (Nottingham's 100 buses will cost £1.5m) Is Scot Govt's new fund sufficient?

The Bus Emission Abatement Retrofit (BEAR) scheme Phase 1 funds have been awarded, mainly to support operators in Glasgow.

Comment: we need precise information about how long it will take for all buses to be Euro VI compliant

Unintended consequences: Cheap non compliant diesel cars flooding market once restrictions on diesels begin to bite. Cheating by removing/altering diesel particulate filters (DPF's) on diesels (should be MoT failure but garages don't look inside filter to check, it's only an external visual check). The filters reduce mpg and reduce the efficiency of diesel engines

Reducing the number of private vehicles entering the city/city centre

Northern city bypass to eradicate severe daily congestion on Kingsway (this measure has been dismissed by Transport Scotland)

Limit through traffic to northern section of inner ring road as was originally proposed when planning the waterfront all those years ago!

promote active travel by LA, orgs, firms and public...offer training, purchase schemes, prizes etc.

If firms don't want workplace charging, then they must reduce staff journeys to work by other means eg working from home, flexi-working, job sharing, car clubs, lift sharing, bicycle pools for staff, electric bikes

demand responsive transport, co-operation between service vehicles

public transport: health & fitness benefits, it's cheaper than driving, relieves pressure on car parking spaces, bikes on buses, **Seagate bus station a disgrace**, improves air quality and helps to solve congestion issues

Park & Ride (should be adopted asap)

<https://www.fifetoday.co.uk/news/traffic-and-travel/calls-to-progress-plans-for-park-and-ride-next-to-tay-road-bridge-1-4985499> (Est 350 cars per day, can this be modelled?)

<https://www.thecourier.co.uk/fp/news/local/dundee/850490/hopes-park-and-choose-can-help-alleviate-dundee-traffic-congestion/>

<https://www.eveningtelegraph.co.uk/fp/call-for-dundee-council-to-revisit-mothballed-park-and-ride-plan/>

Uptake of EV's

Mandatory charging points at home for all new-builds with garages (building regs), what projections are being used for EV uptake? Expand charging network eg 200 charging points on lamp-posts (Brighton), Dundee has similar plans.....

Vehicle Hire Firms should offer EV's. City-wide publicity campaign to promote EV's, car sharing and car clubs

Commercial vehicles, either battery only or plug-in hybrids, are now appearing on the market, are there projections for their uptake?

Other specific measures

Broughty Station upgrade

20 mph speed limits within inner Ring Road, eg Bergen which also limits the city centre to EV's only

scrappage schemes, encouraging trade-ins, even if only by moral-suasion (please don't pollute your fellow citizens' air!), vehicle modifications eg filters

References: UK Govt strategy for Active Travel: *Active travel: increasing levels of walking or cycling in England*

SECAP: Mobility Section: only 1% of journeys in Dundee were made by bike – that’s a third less than the Scottish average on both scores and this despite the fact that 41% of Dundee Households do not own a car.

Comment: It’s not safe to cycle on our roads and air pollution is noticeably worse in recent times especially at peak rush hour times

In line with the Dundee Cycling Strategy 2016, cycle paths are being systematically upgraded and extended where feasible

Suggestion: Citizens’ Assembly on LEZ issues in which strategic matters could be debated eg City Centre proposals, what should go on in our city centres? A City Centre appraisal is currently being undertaken and any LEZ should be integrated into this

SEPA is working with the Glasgow Science Centre to develop a mobile version of the CAFSexhibit launched there last year. Initial funding has been received to allow the exhibit to be located in the four cities that are currently undertaking LEZ assessments.

Question: is this coming to Dundee?

POOR QUALITY MAPS/DIAGRAMS IN SYSTRA’s LEZ report. It is hard to read the number of vehicles entering and leaving the city. We need more accurate figures about journey destinations; anecdotally we all know of drivers coming from all over Fife and Angus to work in Dundee and vice versa;

Final comment: Don’t treat the LEZ as a done deal, there may be better alternatives eg Nottingham’s plans

Friends of the Earth Tayside

We have completed the on-line template for responses, but feel it is important that some other wider points are considered.

The scope of the LEZ proposals is limited, using a particular mechanism to reduce geographical concentrations of air pollution from vehicles – it has to be combined with other measures, in a strategic approach to tackling both:

- the number of polluting vehicles in use in the city to cut down on toxic air pollution (NO₂, NO_X, and particulates), in line with the Scottish Government’s strategy
- the number of fossil-fuelled vehicles in use in the city which are contributing to greenhouse gas emissions (CO₂ equivalent), to help meet Scottish Government climate change targets.

This will have additional benefits for public health arising from the shift to more active forms of travel, and for economic productivity through reduced traffic congestion and more active lifestyles.

The LEZ should therefore be considered more strategically, alongside other measures to manage and reshape travel and transport patterns in Dundee, including:

Further development of infrastructure and regulations to encourage the use of electric vehicles

- Wider introduction of 20 mph zones

- Upgrading of the bus fleet to Euro 6 standard
- Development of a more extensive network of cycle routes and footpaths
- Extension of facilities for cycle hire in the city centre, including electric bikes
- Introduction of the workplace parking levy
- Creation of Park and Ride facilities at the main entry points to Dundee
- A more innovative approach to public transport, such as demand responsive bus services and fare reductions at certain times.

At first sight the proposed LEZ is seriously inadequate as the Lochee Road corridor is explicitly excluded, despite being recognised as one of the worst areas of Dundee for air pollution, repeatedly exceeding legal limits. This exclusion is due to the anticipated impact from non-compliant vehicles being pushed onto neighbouring residential streets that are not designed for heavy flows of traffic. West Marketgait and Dock Street are also excluded because of the impacts on through traffic, despite high levels of air pollution which may continue to exceed the legal limits. The LEZ proposals therefore fail to offer a complete response to the main problem of air pollution which they are intended to tackle, and the Systra report states that other measures are necessary to deal with this. The Council report of 20 September to the Community Safety and Public Protection Committee recognises this. The solution could include a combination of other measures which (for Lochee Road) could include a Park and Ride facility near the Coupar Angus Road/Kingsway junction (with bike hire as well as bus rides at discounted cost), creation of a safe cycle route into the city centre, and restriction of bus services to those meeting Euro 6 standard.

We therefore feel strongly that the finalisation and implementation of the LEZ proposals should be accompanied by a complementary set of measures to tackle the excluded locations with high levels of air pollution. These should all be set within a strategic approach, where the full range of sustainable travel and transport interventions is explained, showing how these should be mutually reinforcing and result in the transformation of Dundee's travel and transport system in line with a vision for a more sustainable Dundee in 5-10 years' time. This would constitute a bolder and more comprehensive response to the problems of an unsustainable transport system, and contribute more effectively to the three objectives set for the LEZ by the CSPP Committee on June 3 2019:

- Protect public health through improve air quality in Dundee and achieving air quality compliance for NO₂, PM₁₀ and PM_{2.5}
- Develop an environment that helps to promote more active and sustainable travel choices in Dundee
- Contribute to the ongoing transformational change in Dundee and help promote the city as an inclusive and desirable place to live, invest, visit and learn.

Client	Dundee City Council
Project	Dundee Low Emission Zone
Title	2019 Consultation on Emerging Options – Stakeholder Engagement Report
Date	13/12/2019
Reference Number	SYSTRA Ref : 108451

Scotland's LEZ – Consultation on Regulations and Guidance

Consultation Questions

Question 1a.

Do you agree with the proposed present-day emission standards for Scottish LEZs?

Yes No

If not, why not?

While we agree with the proposed present-day emission standards, we believe that the consideration to scope motorcycles out of being included in LEZ designs should not be taken forward. Reasons for including a present day emission standard for motorcycles is that this would enable local authorities to include them should it be identified that there is a need to in their area. If they are not included in the Regulations, then they could not be included in LEZ designs. Motorbikes are a source of emissions to air and while minimal, they do provide some contribution. However there could be enforcement issues for motorbikes as their number plate is only on the back of the vehicle and therefore additional cameras may be required which would increase the cost of the LEZ scheme. This needs to be considered.

Question 1b.

What are your views on Scotland making a transformative shift to zero or ultra-low emission city centres by 2030?

Please be as specific as possible in your reasoning.

This is a laudable ambition which would minimise local air quality impacts of road transport well beyond current standards and make a significant contribution to reducing emissions that impact on climate change. However, in order to introduce such a scheme it would require a significant financial commitment in relation to: infrastructure such as Park and Choose/Ride; additional investment in infrastructure to support EVs (particularly in Dundee where much of the city's housing stock are tenements); support for bus operators, freight industry and businesses to adjust, adapt and prepare for zero or ultra-low emission city centres.

The climate change objective is not the same as the air quality objective. Diesel vehicles (older) perform poorly in AQ terms when compared to petrol vehicles however when it comes to Climate Change, petrol vehicles perform significantly poorer than diesel ones. There is a clear difference between the two objectives and this needs to be addressed by Central Government and provide clear guidance and LEZ regulations so local authorities know the legal framework that they have to work with when developing LEZs. This clarity is crucial for DCC delivering an LEZ.

In addition, it should be noted that bus operators, motorists, businesses could be making very significant investment decisions for the next 10 to 15 years. A bus operator will expect to get 15 to 20 years out of a brand new bus and some people will want to get at least 10 years out of their car. These individuals and organisations should be informed of the future regulations and this

suggests that the current Euro VI/ 6 and Euro 4 for petrol may only be in place for a short period of time which does not assist with long term investment plans.

If not in Regulation, the supporting Guidance document needs to be clear on what the timeframe is for the Climate Change objective and how this should be included in forthcoming LEZ proposals by the 4 cities. Advice needs to be clear on whether they need to include the consideration of climate change now, or only further down the line once potential emission standards for climate change emissions are known. Should they not need to be considered as a part of forthcoming proposals, then this will need to be made clear to those that may challenge a city's LEZ proposal which so far has been based on predicted effects on NO2 reduction rather than CO2. Dundee City Council is bringing forward LEZ proposals and it is vitally important that the city knows the legal framework.

Question 2a.

Which of the proposed national LEZ exemptions do you agree with? Select all that apply.

- Emergency Vehicles Military Vehicles Historic Vehicles
 Vehicles for Disabled Persons Showman Vehicles

Please be as specific as possible in your reasoning.

The exemption for 'blue badge scheme' holders will need to be able to be applied in a robust manner to prevent exploitation if they are exempted from the LEZ. There will be technical challenges to how this can be enforced with clear guidance and a technical solution needing to be provided to local authorities. We agree with the inclusion of vehicles registered with a 'disabled' or 'disabled passenger vehicles' tax class.

While the exclusion of historic vehicles is agreed, clarification of specifics other than just the vehicles age which may be applicable is needed. Within the footnote to this question in the consultation document, there is reference to Directive 2014/45/EU and a definition of a historic vehicle. This definition refers to a vehicle 'at least 30 years old; **which is preserved and maintained in a historically correct condition; which is not used as a means of daily transport;** and which is therefore a part of our technical & cultural heritage'. Would the criteria 'which is not used as a means of daily transport' therefore exclude historic vehicles that are used for commercial purposes, such as for wedding hire cars or historic bus tours? Further guidance will need to be provided.

Question 2b.

Are there any other LEZ exemptions you would propose?

If so, what should these exemptions be and why?

In addition to those already on the proposed list, we would suggest that specialist vehicles used for activities such as snow clearance / road gritting are also included. These vehicles are likely to have a long life-span and are only used sporadically to serve a purpose

Emergency Voluntary sector organisations should get an exemption as they have specialist vehicles that carry lifesaving equipment who are often requested to attend jobs within the urban environment by the police. Voluntary organisations do not have the resources to replace vehicles on a regular basis unlike the professional services.

The exemptions should be reviewed when there is clarity over the Guidance and Climate change LEZ regulations to ensure that no significant issues arise and certain vehicles are prohibited unnecessarily.

Question 3a.

Do you agree with the proposed base level and subsequent tiers of penalty charges for each vehicle type as outlined in Table 5?

Yes No

Please explain your answer

While we agree with the proposed base levels, we do not agree with the subsequent tiers of penalty charges. The PCN should be in line with existing Parking and Bus Lane enforcement and should be consistent across all LEZs in Scotland. We consider though that the maximum levels for private cars / taxis / motorbikes shouldn't be at the same level as for large vehicles such as bus/coach/HGV's. The £5000 maximum for individuals seems unduly punitive. It is suggested that the maximum for private cars / taxis / motorbikes should be limited to tier 3 (£480). A discount for the prompt payment of base level penalty could be made available, but this option should not be available for subsequent penalties.

Question 3b.

Which surcharge 'curve' in Figure 1 represents the best approach to designing a surcharge?

Graph 1 Graph 2 Graph 3 Graph 4

Please explain your answer

Graph 2 would be the preferred option due to being simple to apply, however as mentioned in Q3a we consider that the surcharge for private cars / taxis / motorbikes should be limited to tier 3 (£480) as a maximum.

Question 3c.

How should the surcharge approach be applied in order to discourage non-compliant vehicles from driving within a LEZ?

Please be as specific as possible in your reasoning.

The surcharge approach should be simple to administer and be made clear to drivers that the penalty rate increases in respect to days, not offences per day.

Question 3d.

How many days should lapse before a registered keeper of a vehicle returns to the base tier of the penalty charge?

Please explain your answer

We agree that there should be an identified period of time which, if no offences are committed during, would allow the movement back down to the base tier level. 28 days has been suggested in the consultation document however this may contribute to some confusion when taking in to account appeal periods for PCN's issued so a longer period may be necessary. Guidance will need to be clear on how such a tier drop is applied.

Question 4.

Do you agree with the general principles of the LEZ enforcement regime?

Yes No

If not, why not?

We agree with the general principles however in regards to prompt payment discretion being for the relevant local authority to consider, we believe that this should be consistent across Scotland and included within the Regulations.

The enforcement regime will require significant resources to set up the system to administer it, both in terms of IT infrastructure, software and staff. These will require an ongoing financial commitment to support LAs in administering LEZ schemes. These costs are likely to increase, at least initially if the LEZ mechanism is used to achieve 'zero emission' or ultra LEZ city centres in future years, as set out in the current programme for Government. We do not consider that any LEZ scheme in Dundee will generate sufficient income to cover the costs of setting up and administering it. The proposed PCN level and structure will de-incentivise any person from driving a non-compliant vehicle within the zone and therefore revenues would quickly reduce to a minimum while ongoing maintenance and administrative costs could be quite high.

Question 5.

What are your views on the proposed list of 'other persons' that local authorities must consult with on their LEZ plans?

Please be as specific as possible in your reasoning.

We support as wide a consultation as possible, however, understandably each stakeholder considers what is most advantageous to its own circumstances or method of operation. The wider the range of statutory consultees, the greater the administrative burden to assess, report on and the complexity in drawing meaningful conclusions. The range of consultees should have some relation to the vehicle types being considered for inclusion in the scheme. Any guidance should advise on a methodology for weighting views expressed by stakeholders, i.e. if a group to whom a LA must consult with does not agree with the LEZ proposal and the LA does not consider their reasons for not supporting, would this trigger the requirement for the Scottish Minister to call for a review / inquiry?

Guidance on what level of consultation is considered appropriate for 'other persons' should be included in the Guidance document.

Question 6.

If a LEZ scheme **review** was undertaken, what elements would you expect the review to investigate and how would the **review ensure transparency and accountability**?

Please be as specific as possible in your reasoning.

How the LEZ Scheme is performing should be monitored in respect its stated objectives. Reporting should be taken through local governance structures , e.g. the relevant Council Committee, Local Community Planning Partnerships and Scottish Government.

The mandatory air quality objective should relate to specific air quality objectives / standards being monitored by the local authority, in particular at locations within and adjacent to the LEZ. The effectiveness of the introduction of a LEZ could be assessed by looking at monitored levels at these locations pre & post the enforcement commencement year. However, as annual mean levels can be influenced by meteorological conditions, decisions should not be based on an individual years data unless there are obvious marked changes in the pollutant levels.

Should the review identify any new areas of exceedence that can be attributed to traffic displacement from the LEZ then these should be prioritised for action.

In addition to the impact on air quality, matters relating to transportation should also be included in the review investigation, such as traffic safety, parking and traffic displacement.

In respect to the Scottish Ministers giving direction to a LA to undertake steps to address an under-performing LEZ's, depending on the nature of the steps outlined by the Ministers, financial assistance would / may need to be provided to do so.

Question 7.

What secondary objectives should be created for LEZ schemes?

Please be as specific as possible in your reasoning.

Secondary objectives should be related to the design of the LEZ and specifically to any locations identified during the LEZ design process that AQ objective levels are predicted to continue to be exceeded post introduction of the LEZ. In addition, secondary objectives should also assist those wishing to enter a LEZ by means other than a non-compliant vehicle as well as traffic safety. We agree with the examples topical areas contained within the consultation document.

Question 8.

Do you agree with the steps outlined in Figure 2 for enabling a LEZ scheme to come into effect?

Yes No

If not, why not?

In principle the flow chart appears appropriate however it is identified that it will take a considerable amount of time to complete this process. Assuming that the bulk of the scheme design work has been carried out in advance of the guidance being published, our estimate taking into account Committee cycles, is that where no examination of the scheme is required the process would take approximately 9-12 months. If an examination of the scheme is required, the process could take approximately 18 months. We believe therefore that this mechanism cannot deliver LEZs in the timeframe set out on the 2017 Programme for Government.

Some suggested amendments to the flow chart include:

- that 'Mandatory Consultation' should be added in at Step 2 which current lists just 'Public Consultation',
- that Step 6 appears unnecessary as the LA Committee has already given approval so following Scottish Ministers approval the scheme should then proceed as already agreed by the Committee?,
- and there is a link from Step 5 back to Step 3 that is not labelled. Is this link necessary as there is already a link from Step 5 to Step 3 which refers to not approved and no examination of a scheme requested?

The Guidance document should include the expected timeframe for the examination of a scheme undertaken by the Scottish Ministers in order for LAs to be able to identify potential LEZ commencement dates.

Question 9.

How can local authorities maximise the technological opportunities available from the deployment of approved devices?

Please be as specific as possible in your reasoning.

LAs will have to install ANPR cameras to enforce the LEZ and there may be other opportunities to enforce other aspects of the Transport (Scotland) Act 2019 such as pavement parking, double parking and dropped kerb parking with the same technology. This technology could be used to manage congestion, road user charging and collecting traffic flow data for other Planning and Transport projects. Technology is advancing at a fast rate and therefore there will be significant opportunities however legislation needs to match what technology can potentially deliver.

Question 10.

What positive or negative impacts do you think LEZ proposals outlined within this consultation may have on: (a) particular groups of people, with particular reference to 'protected characteristics' listed above (b) the very young and old (c) people facing socioeconomic disadvantages?

(a) particular groups of people, with particular reference to 'protected characteristics' listed above:

Positive: If effective LEZs will have a positive impact by reducing levels of transport derived emissions of local air pollutants.
Negative: Should no exemptions be made for 'blue badge' or disability adapted vehicles, then there may be an impact on those who rely on their own vehicle should it be non-compliant.

(b) the very young and old:

Positive: If effective LEZs will have a positive impact by reducing levels of transport derived emissions of local air pollutants.
Negative: Again, as per Q10a above, should no exemptions be made for 'blue badge' or disability adapted vehicles, then there may be an impact on those who rely on their own vehicle should it be non-compliant.

(c) people facing socioeconomic disadvantages:

Positive: If effective LEZs will have a positive impact by reducing levels of transport derived emissions of local air pollutants.
Negative: If an LEZ includes an area of deprivation it would create a situation that would require residents with limited funds to change their vehicles should their existing vehicle be non-compliant. While those living out with of the LEZ may be able to avoid driving through any LEZ, those residing within in one would not. There could be significant impacts for people on lower incomes who need a car and cannot use an alternative means of transportation. UK / Scottish Government support should be provided as a priority to such individuals who need to change to a compliant vehicle.

Question 11.

Do you think the LEZ proposals outlined in this consultation are likely to increase, reduce or maintain the costs and burdens placed on business sectors?

Please be as specific as possible in your reasoning.

There is likely to be an increase cost for the business sector should vehicle replacements be necessary. It is therefore important that streams of financial assistance available by the Scottish / UK Govts should be identified and made know to those who could benefit from them to reduce financial burdens.

Question 12.

What impacts do you think the LEZ proposals outlined within this consultation may have on the personal data and privacy of individuals?

Please explain your answer

Information about an individuals' movement will potentially be captured, leading to concerns. The system should be designed to mitigate this, e.g. by automatically deleting data not required for enforcement purposes within an short timescale. It should be designed that only if a non-compliant vehicle is identified that a registered keepers details are sought for the issuing of PCN. Any ANPR enforcement system will require clear guidance to LA's for the enforcement and data protection of individuals. It is envisaged that this will be similar to parking and bus lane enforcement which currently occurs. The system will have to comply with GDPR as the enforcement of the scheme is a very contentious issue and legal challenges are likely.

Question 13.

Do you think the proposals outlined within this consultation are likely to have an impact on the environment? If so, which ones and how?

Please be as specific as possible in your reasoning.

There should be predominantly positive effects on the environment due to a reduction in transport emissions. However, there may be some localised areas of negative effects should traffic displacement result from the LEZ. Some local residents could have additional traffic on their road and this could present a significant challenges to councils particularly when the additional traffic is non-complaint to the LEZ emission standards. Traffic displacement may also lead to road traffic noise increases in these areas too. This will require careful monitoring and should be considered in the overall review of a LEZ.

Question 14.

Do you have any other comments that you would like to add on the Scottish Government's proposals outlined within this consultation?

Please be as specific as possible in your reasoning.

No Comment.