

Please give us
your views by
31st January
2020

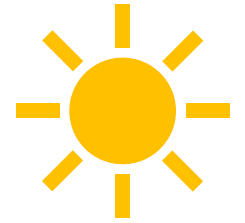
Appendix 1



Oxford Zero Emission Zone

Cleaner air / Quieter streets / Climate action

January 2020 update



6



CONNECTING
OXFORDSHIRE

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A JOURNEY TO ZERO

In January 2019 Oxfordshire County Council and Oxford City Council published an updated road map for the journey to zero emission transport in Oxford and beyond. Even in the short time since January, there has been increasing focus locally, nationally and globally on the harmful impacts of emissions on the air we breathe and our planet's climate.

Transport emissions remain one of the single largest contributors to these problems, making our goal of a zero emission transport system more relevant than ever.

Since January the councils have agreed ambitious new taxi and bus emission standards. In September we also launched Connecting Oxford, a bold plan to reduce traffic and improve connectivity in and around Oxford. We've also been finalising the Zero Emission Zone scheme for the heart of Oxford city centre – the "Red Zone".

This document sets out a proposal to charge a daily fee for non-zero emission vehicles to enter the Red Zone, to accelerate the transition to zero emission transport in the zone, whilst maintaining access for shops and other businesses.

We're presenting some new ideas in this document: we need your feedback so we can make decisions about the next steps.

The journey to zero continues!



Cllr Yvonne Constance
Cabinet Member for
Environment
Oxfordshire County Council



Cllr Tom Hayes
Cabinet Member for Zero
Carbon Oxford
Oxford City Council

EXECUTIVE SUMMARY

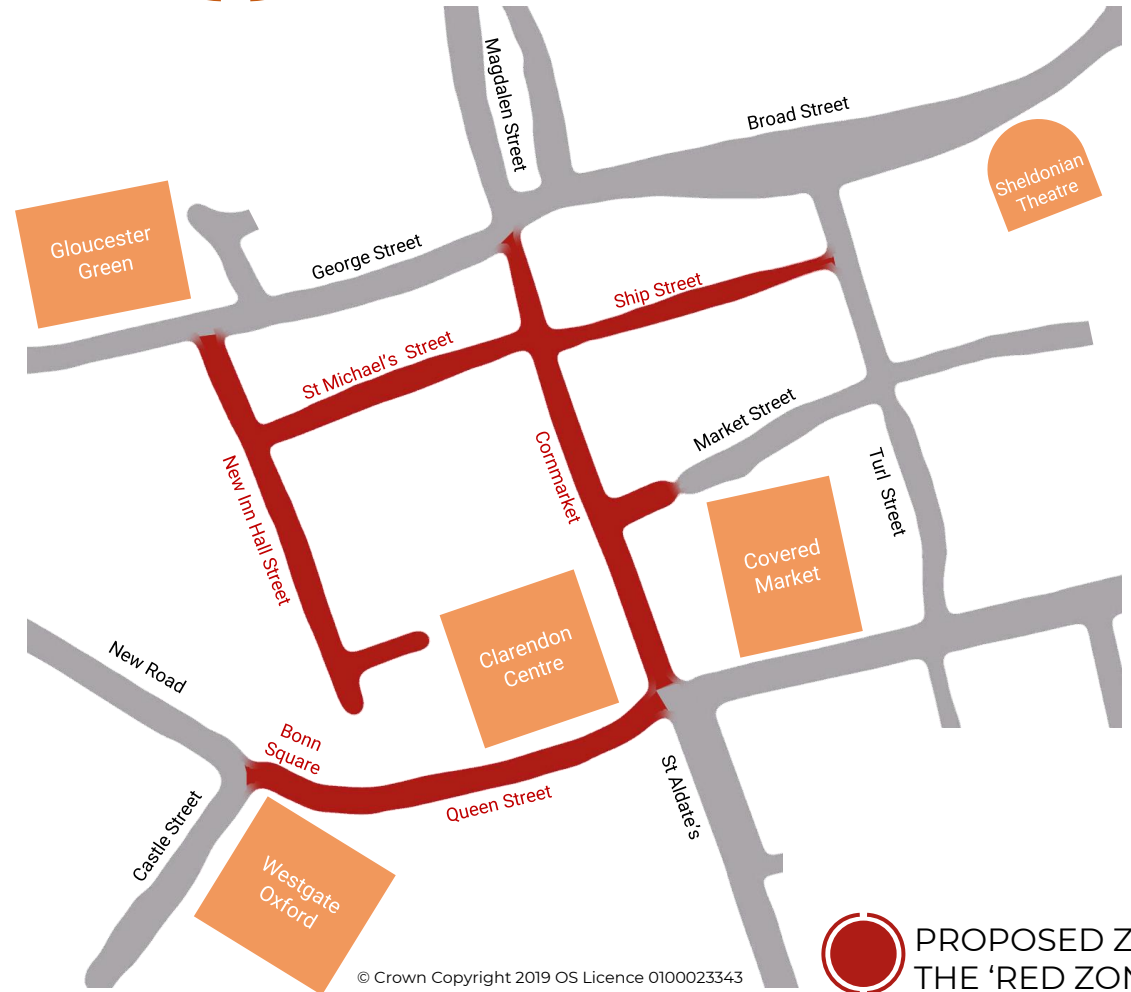
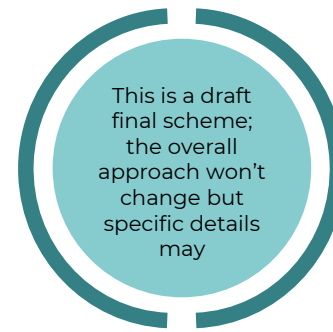
Oxfordshire County Council and Oxford City Council are proposing to create a Zero Emission Zone in Oxford city centre, starting in December 2020.

The proposed ZEZ is shown on the map opposite; the area is referred to as the “Red Zone”.

Zero emission vehicles would be able to drive in the zone free of charge. Other vehicles would have to pay £10 per day (rising to £20 per day from December 2024) to drive in the zone between 7am and 7pm. There would be discounts and exemptions for some road users, including residents (see page 8).

The ZEZ will lead to cleaner air, quieter streets, contribute to action on climate change, and allow the councils to gain useful experience and information to inform future, larger phases of the ZEZ.

The ZEZ Red Zone is just one part of our journey to zero emission transport.



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 PROPOSED ZEZ
THE 'RED ZONE'

THE CASE FOR CHANGE

Air pollution and carbon emissions cause significant harm to people's health and the environment.

Poor air quality disproportionately affects more vulnerable groups, such as pregnant women, children, older people and those with pre-existing respiratory and cardiovascular conditions.

Transport accounts for about 75% of nitrogen dioxide pollution in Oxford. Although the city's air quality has improved significantly in recent years (see chart on page 5), there are still several locations where the national and European legal limit value for nitrogen dioxide is exceeded. There is no 'safe' level of nitrogen dioxide: even low levels can be harmful over the long-term.

The predicted impact of climate change is well-understood, with the UK government recently committing to zero carbon by 2050. Oxfordshire councils are supporting this by making their own commitments to zero carbon. This includes reducing transport's contribution to carbon dioxide emissions, which in the UK is estimated to be 33 per cent. In Oxford alone 50 tonnes of carbon dioxide are emitted every morning rush hour by road traffic.

The Oxford ZEZ Red Zone (see map on page 7) covers a large part of the main pedestrian and retail core of Oxford city centre, with high pedestrian and cycle flows and relatively low traffic flows, all of which is access traffic (there are no through routes).

The zone is likely to be the first area in the UK to set a zero emission requirement. There are schemes in London and other UK cities which set "ultra low emission" requirements (the precise definition of which varies), but none which set a zero emission requirement.

We've chosen the Red Zone as part of the first phase of the Oxford ZEZ because it has very high pedestrian and cycle flows and is small and manageable enough to make it suitable for an ambitious, 'trail-blazing' scheme.

Although the traffic volumes and therefore the absolute levels of vehicle emissions are not high, the high numbers of pedestrians and cyclists in the area mean there is a high degree of exposure to any airborne pollution present.



UP TO
36,000
lives are shortened by air pollution in the UK every year



75%
of nitrogen dioxide in Oxford comes from transport

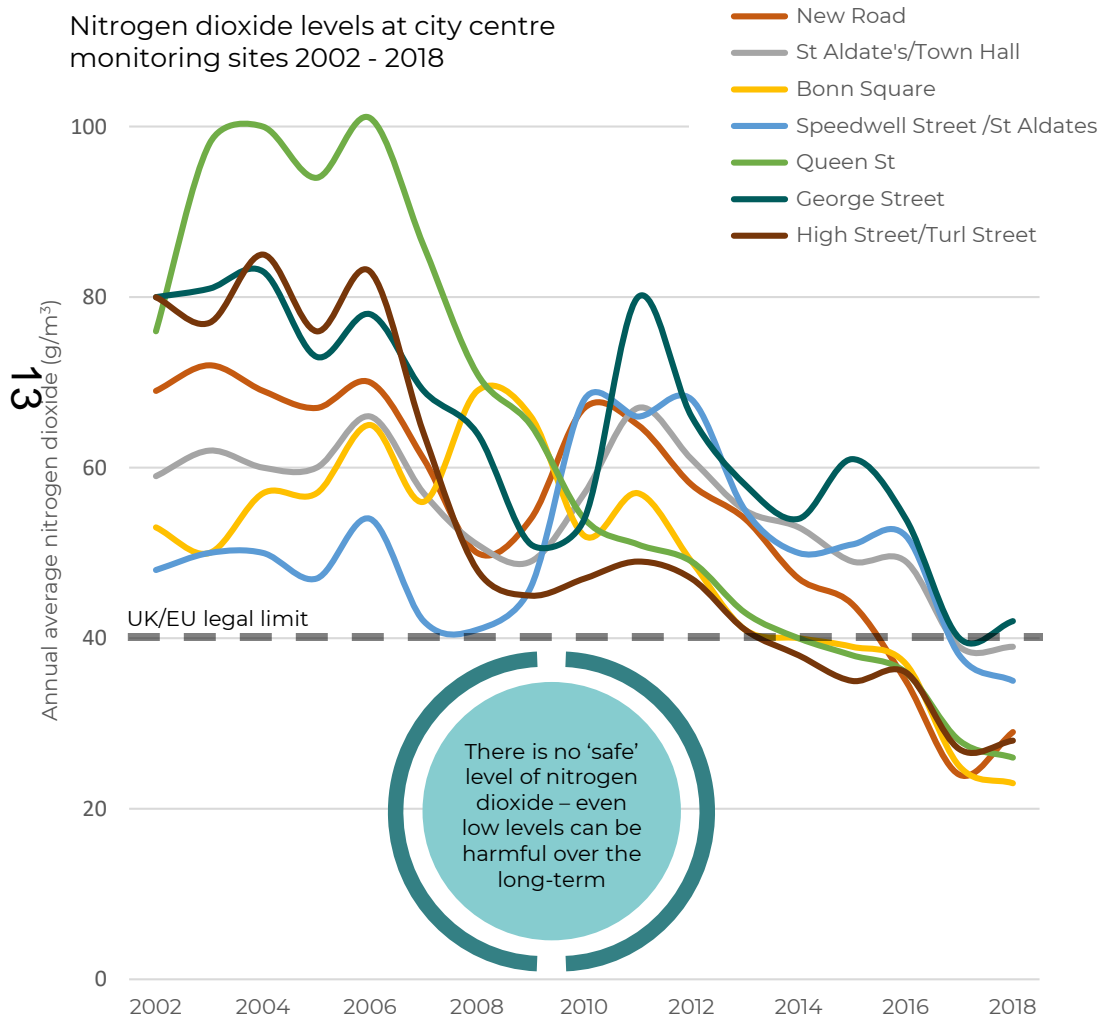


50 tonnes
of CO₂ emitted by road traffic in Oxford every morning rush hour



THE CASE FOR CHANGE

Nitrogen dioxide levels at city centre monitoring sites 2002 - 2018



The zone will help reduce traffic pollution in streets surrounding the Red Zone through which vehicles have to pass to reach the zone. Many of these streets have higher levels of pollution, near or just above the national and European limit value.

As well as reducing pollution, the Red Zone ZEZ will reduce the number of motorised vehicles in the area, improving the conditions for pedestrians and cyclists. Zero emission vehicles are generally also very quiet, so noise from vehicles will be reduced.

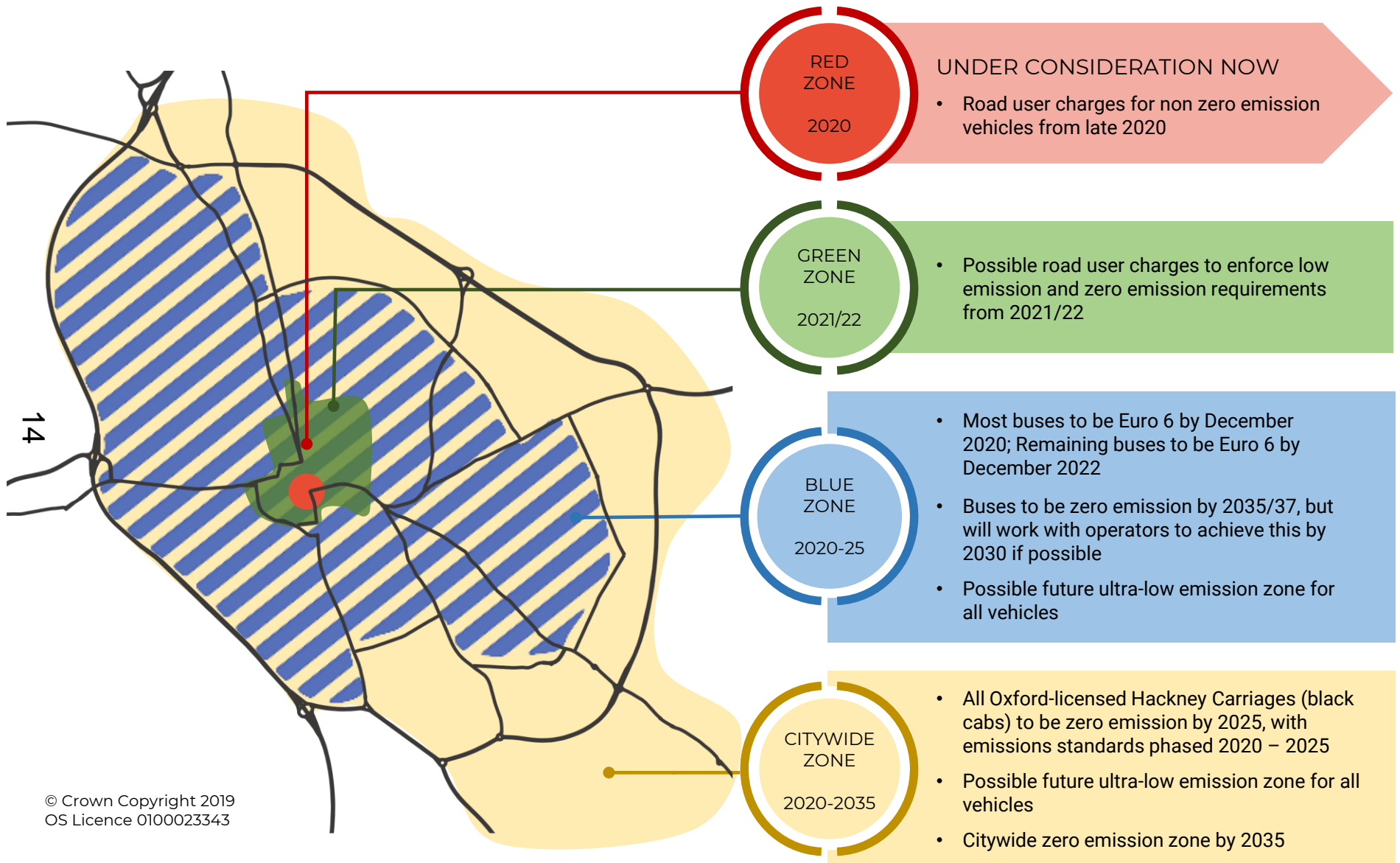
WE'RE NOT ALONE

More than [20 UK cities](#) have implemented, or are considering, charging-based zones to reduce traffic emissions.

There are existing zones in London and Norwich; zones are being introduced in Birmingham, Leeds, Manchester and Newcastle and are also being considered in Aberdeen, Bath, Bristol, Cambridge, Cardiff, Derby, Dundee, Edinburgh, Fareham, Glasgow, Reading, Sheffield, Slough, Warrington and York.

Hackney have recently introduced restriction-based [ULEV Streets](#), and the City of London is planning [Zero Emission Zones](#) in the next few years.

ZERO EMISSION ZONE / PHASING



RED ZONE PROPOSALS

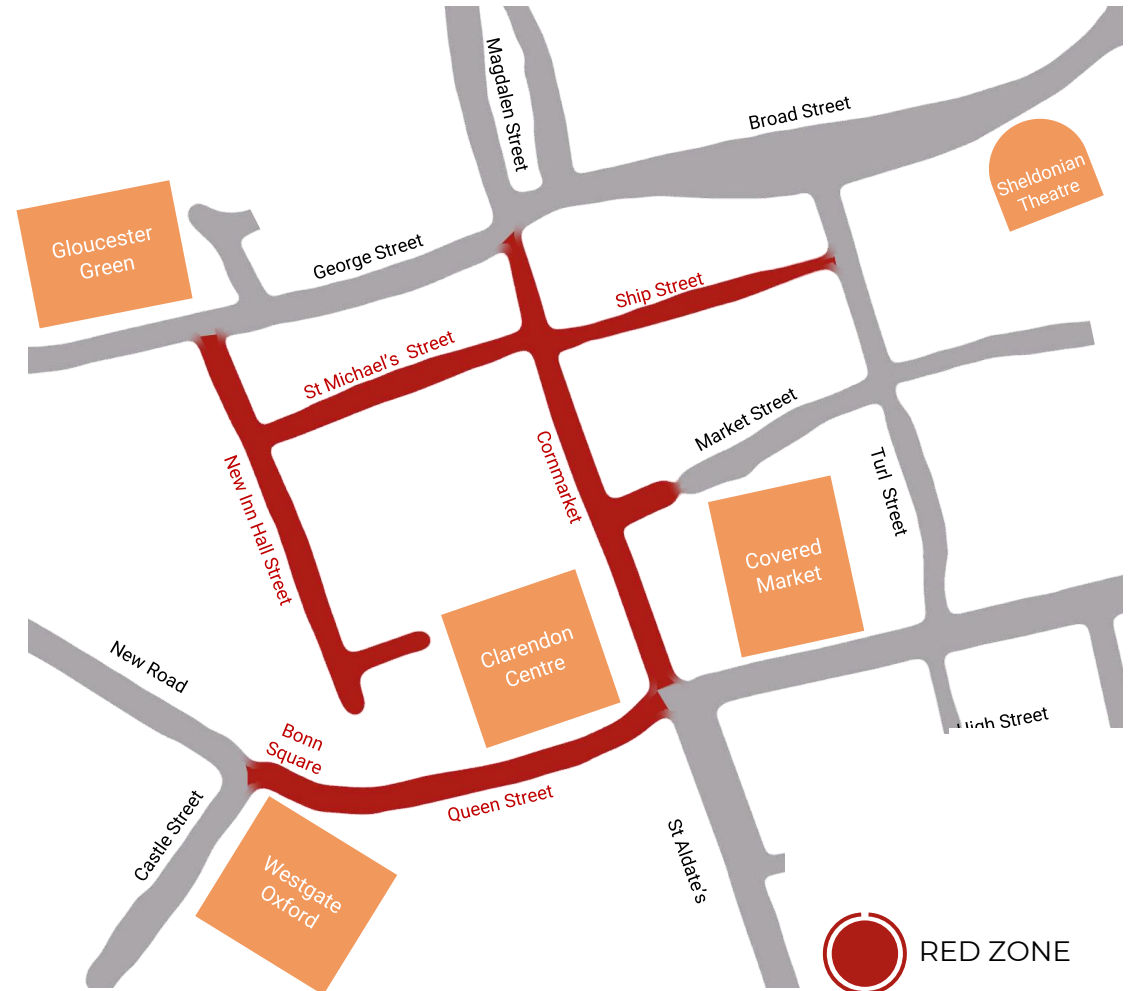
We're proposing to introduce a road user charging scheme for the Red Zone from 1 December 2020. This is the same type of scheme as used in London and other UK cities to enforce emission requirements.

Zero emission vehicles would be able to drive in the Red Zone free of charge. Other vehicles would have to pay £10 per day (rising to £20 per day from December 2024) to drive in the zone between 7am and 7pm. There would be no charge outside these times.

There would be discounts and exemptions for some road users, including residents (see page 8).




Data on traffic currently using the Red Zone is available on our [main ZEZ webpage](#)



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PROPOSED DAILY CHARGES

FOR NON-COMPLIANT VEHICLES

	1 December 2020 to 30 November 2024	1 December 2024 to 1 December 2030	December 2030 onwards
 Car	£10	£20	£20
 Van/Heavy Goods Vehicle Bus/Coach (except registered local buses)	£10	£20	£20
 Hackney Carriage, licensed in Oxford	£0	£0	£0
 All private hire vehicles. Hackney Carriage licensed outside Oxford	£10	£20	£20
 Moped or motorcycle	£10	£20	£20
 Registered local bus	£0	£0	£0
 Blue badge holder	£0	£20**	£20
 Vehicles registered to businesses within Red Zone	£0	£10	£20
 Red Zone residents' vehicles	£1*	£2*	£20



Charges would apply 7am – 7pm,
seven days a week



All zero emission vehicles £0



*Residents may pay the daily charge,
or a one-off annual charge of £250
(until 2024) and £500 (from 2024 to
2030). Any on-street resident permit
charges paid would be deducted
from these charges.



**Blue badge holders would not pay
a charge until 2024; discounts will
be considered on the proposed
charge from 2024



Emergency vehicles, tax-exempt
historic vehicles and hearses would
initially be exempt but this may be
reviewed in future. We will work with
emergency services to reduce
emissions from their fleets.



Oxford licensed Hackney Carriages
and registered local buses are
subject to separate emissions
requirements (see page 6)

WHY A CHARGING SCHEME?

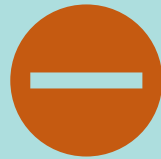


Several methods have been considered for the implementation and enforcement of the Red Zone. Each method has advantages and disadvantages; the overall aim has been to find an approach that:

- Provides an effective incentive for zero emission transport
- Ensures businesses and residents in the zone are still able to gain access for essential deliveries and servicing
- Can be adapted to accommodate the diverse range of activities within the zone
- Can be effectively enforced
- Does not have high implementation or enforcement costs
- Could form the basis for future phases of the ZEZ, such as the Green Zone in 2021/22

The councils' thinking on the best approach has evolved over the last two years through discussions with businesses in the zone and developments nationally in emissions-control schemes.

IMPLEMENTATION METHODS CONSIDERED



When it was first conceived in 2015, the expectation was that the zero emission zone would be based on a **prohibition of driving** for all vehicles except zero emission vehicles. However, such a restriction would require police enforcement powers to be used. Previous consultations on the ZEZ strongly suggest that a 'blunt' prohibition of driving would also cause major practical problems for some businesses in the area, and it would be hard to overcome these without offering extensive exemptions and/or reducing the hours of operation; both of which could undermine the scheme's purpose.



An alternative approach put forward in our January 2019 update was to use **parking and loading restrictions** to enforce the ZEZ. This would simplify the enforcement, which could be done by the county council, but would reduce the scope of the scheme as any vehicle would be able to drive in the zone as long as it did not stop to park, load or unload on-street. Although it overcomes some of the practical concerns, a scheme based on parking and loading restrictions would still be a relatively blunt mechanism and would again require significant exemptions and/or limited operating hours to allow essential servicing and deliveries.



A **charging scheme** overcomes many of the challenges associated with the two methods above. It can be enforced by the county council and can be tailored to allow discounts and 'grace periods' for particular classes of vehicle or types of road user (e.g. businesses and residents). It would apply to all traffic entering the zone, not just parking and loading, and allows any vehicle to gain access if necessary. Charging schemes are used in all of the large traffic emission control zones currently in place or under consideration in the UK. And of course a charging scheme could generate some funding, which can be used to help businesses and residents in the zone make the transition to zero emission vehicles.

HOW WOULD IT WORK?

PAYMENTS AND ENFORCEMENT

The Red Zone charging scheme would work in a similar way to the London congestion charge and ultra-low emission zone.

Signs would be installed around the perimeter of the zone and on the routes into the city to notify drivers of the ZEZ.

Drivers driving or parking in the zone during the charging hours would need to pay the required charge – or register for a discount:

18. Before entering the zone; OR
- By midnight on the working day after entering the zone.

Payments and registrations would be accepted by a variety of methods; we expect the majority will do this online.

The zone would be enforced using cameras equipped with automatic number plate recognition technology.

Drivers who have not paid the correct charge or registered for a discount may be sent a Penalty Charge Notice (PCN) by post. The maximum penalty would be £120, with a 50% discount for prompt payment, plus the original charge.

ZERO EMISSION VEHICLES

The criteria for a vehicle to be allowed free entry into the ZEZ are below. These allow some plug-in hybrids capable of zero emission driving. Hydrogen fuel cell or battery electric drive trains are acceptable.

The criteria are based on the government's [Plug-in Grant](#) qualifying criteria.

Requirements for free entry to ZEZ:	
Car	CO ₂ less than 50g/km 70 miles zero emission range
Moped Motorcycle	CO ₂ 0g/km
Vans	CO ₂ less than 75g/km 10 miles zero emission range
Large vans and trucks	CO ₂ at least 50% less than the equivalent conventional Euro VI vehicle of the same load capacity.
Heavy goods vehicles	10 miles zero emission range

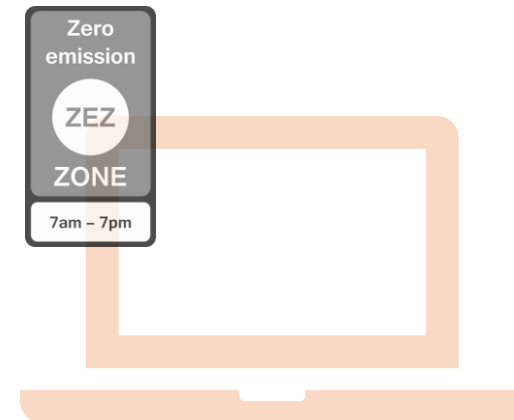
Qualifying vehicles will need to complete a one-off registration process to benefit from free access to the zone.

OTHER DISCOUNTS

Discounts would be available for certain road users, as shown on page 8. Charges and discounts may be amended in response to the feedback we receive; the final proposed charges will then be published as part of a formal consultation during 2020.

To benefit from a discount, qualifying drivers would need to complete a one-off registration process for the relevant discount the first time they enter the zone, which would then apply indefinitely.

Red Zone residents' vehicles would not be liable for ZEZ charges if they are parked off-street or in a permit holder parking bay in the vehicle keeper's 'home' controlled parking zone.



BENEFITS



The Red Zone charging scheme will lead to cleaner air and quieter streets, and allow the councils to gain useful experience and information to inform future, larger phases of the ZEZ.

The exact impact of the zone will depend on how people change their behaviour in response to the ZEZ charges. The range of possible responses are set out below.

We are asking businesses in the zone and those who need to access the zone to tell us how they would respond to the ZEZ.

This information will help us estimate the scheme’s direct benefits, but will also allow us to estimate the income the scheme could raise to support residents and businesses in the zone in making the transition to zero emission transport.

The purpose of the scheme is to reduce emissions within the zone, so we hope the main responses will be those that result in less traffic, or a switch to a zero emission vehicle.

SUPPORTING RESIDENTS & BUSINESSES IN THE ZONE

Income raised by the scheme must, by law, be used to improve local transport. The councils propose to use any income to support businesses and residents in the Red Zone in making the transition to zero emission transport. This could include:



Installing or providing grants for vehicle charging points



Supporting freight consolidation services for the city centre



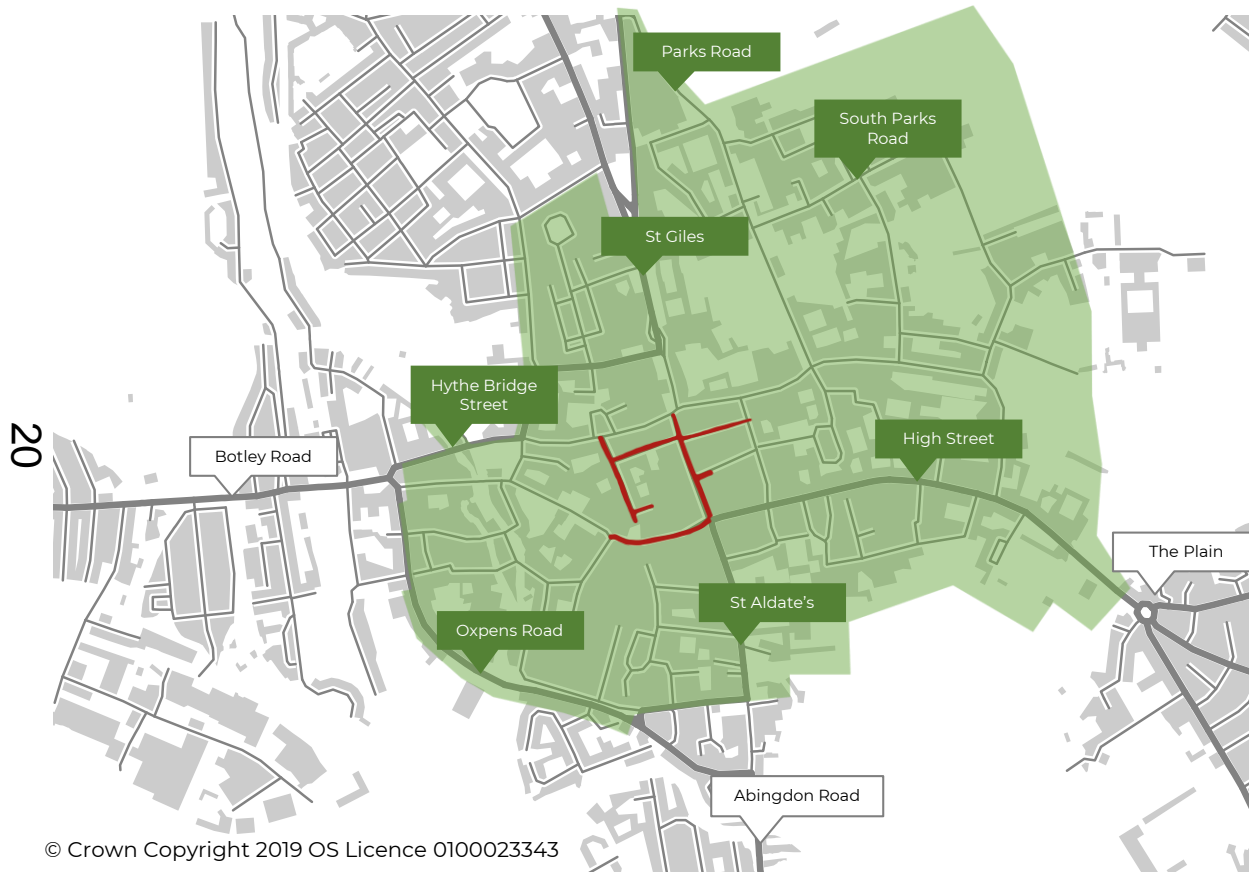
Providing financial assistance for residents & businesses to switch to zero emission vehicles

We will be able to estimate the likely funding available once we have feedback about how drivers and businesses would be likely to respond to the ZEZ charges.

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Response to ZEZ	Description
Pay charge	Pay the full charge to bring a non-compliant vehicle into the zone
Change mode	Switch to walk, cycle, bus; including use of cycle freight services
Not travel	No longer come into the zone, or come in less often, e.g. by reducing frequency of deliveries
Change route	Plan journey to avoid zone
Switch vehicle	Enter the zone but with a compliant vehicle
Change time	Enter the zone but outside the charging hours
Register for discount	Enter zone with a non-compliant vehicle having registered for a discount
Contravene	Enter the zone during the charging hours with a non-compliant vehicle, without registering for a discount (liable for a Penalty Charge)

FUTURE EXPANSION: 2021/22



THE GREEN ZONE – 2021/22

The next major stage of the ZEZ after the Red Zone would be the Green Zone in 2021/22, covering most of Oxford city centre.

This could involve a charging scheme with:

- Daily charges for high emission vehicles - worse than Euro 6 diesel or Euro 4 petrol
- A discounted daily charge for low emission vehicles – Euro 6 diesel, Euro 4 petrol or better
- No charge for zero emission vehicles

There would be discounts available for residents' cars, vans or motorcycles, providing a reasonable window to replace non-compliant vehicles.

It is expected that the Red Zone would continue to operate even when the Green Zone has been implemented. The Green Zone requirements are not expected to apply in the Red Zone.

The implementation of the Green Zone and the details of how it would work are subject to further technical work and consultation during 2020.



GREEN ZONE



RED ZONE

SUPPORTING SCHEMES

Working with our partners, we've secured millions for schemes and infrastructure to support zero emission transport; some examples are below. The funding amounts below are grants from the government secured by the councils, not local funding.

We are also converting our own fleets to zero emission vehicles where possible.



£10 million towards

Energy Superhub Oxford, a giant battery to store grid energy and power thousands of electric vehicles via rapid charging stations



£200,000 towards

Electric delivery vehicles and charging points for the Covered Market



£128,500 towards

Testing of low cost innovative air quality sensors to map air pollution and exposure



£2.3 million towards

Electric and low emission buses



£122,500 towards

Advice for businesses in the city centre on zero emission delivery and servicing solutions



£500,000 towards

Electric charging points for hackney carriages and private hire vehicles

CONNECTING OXFORD

The councils launched a scheme called Connecting Oxford in September 2019 and have received over 3000 responses to the scheme's proposals for additional traffic restrictions and a workplace parking levy (illustrated opposite).

The traffic restrictions are roads closed to traffic, but with access for pedestrians, cyclists, buses and taxis.

The workplace parking levy is charge paid by employers for each commuter parking space they provide.

22 More information about Connecting Oxford is available [on our website](#).

Connecting Oxford, if implemented, will significantly reduce traffic in and around Oxford, which will also reduce traffic emissions.

However, our long-term aim is a zero emission transport system; the Zero Emission Zone will tackle the emissions from the traffic that remains after the Connecting Oxford proposals are implemented.

Connecting Oxford and the ZEZ are both part of the overall transport strategy for the city, which is set out in the [Oxford Transport Strategy](#) and the [Oxford Local Plan](#).

Decisions about the next stages of Connecting Oxford will be made in January 2020.



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A CHARGING SCHEME FOR CONNECTING OXFORD?

A road user charging scheme (as proposed for the ZEZ) has not been completely ruled out for Connecting Oxford, but it is not the councils' preferred approach because:

- A congestion charge would not achieve – and sustain – the same level of traffic reduction as traffic restrictions, particularly if it applied only to the city centre.
- A congestion charge covering the whole city would require a large number of enforcement cameras and involve hundreds of thousands of daily transactions; this would make it expensive to operate, with less funding available for transport improvements.

These issues would not apply to a small scale emissions-based charging scheme as proposed for the Zero Emission Zone.

WIDER STRATEGY

The Zero Emission Zone and Connecting Oxford are just one part of the city and county councils' efforts to improve connectivity, reduce emissions and support sustainable growth across the county.

We work in partnership with other councils and organisations in Oxfordshire on a wide variety of policies, schemes and initiatives; some of which are listed opposite.

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More information is available online via the links below. If you are reading a printed version of this document, please search online for the documents below, or contact us using the details at the end of the document for more information.

[Oxfordshire Local Transport Plan](#)

[Oxfordshire Plan 2050](#)

[Oxford Air Quality Management](#)

[Oxford Local Plan](#)

[Oxfordshire Growth Board](#)

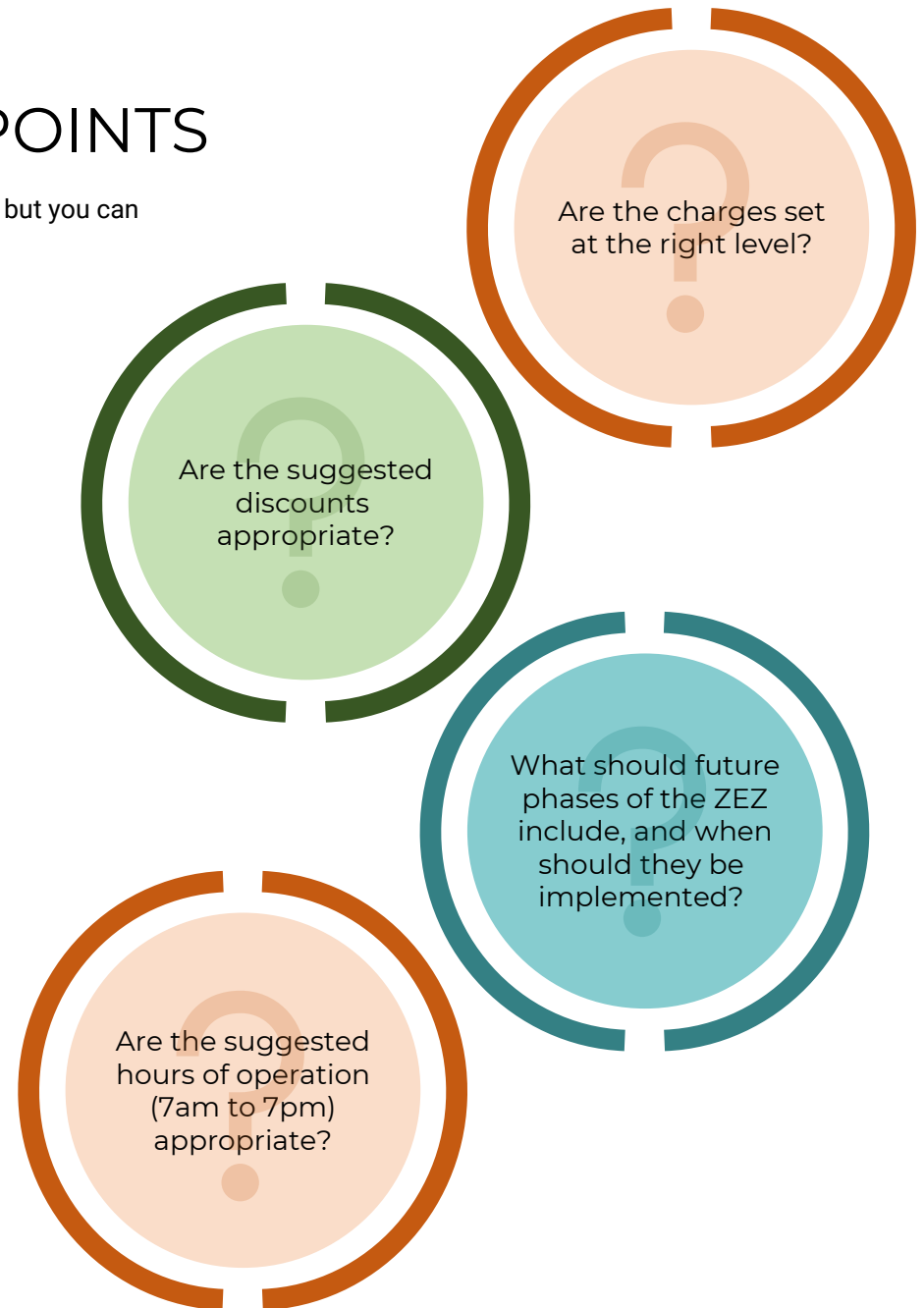


NEXT STEPS / DISCUSSION POINTS

The discussion points are topics where we are particularly seeking feedback, but you can comment on any aspect of the scheme.

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Activity	Start	Finish
Informal consultation on final Red Zone charging scheme	7 th January 2020	31 st January 2020
Formal consultation on Red Zone charging scheme	March 2020	
Both councils consider responses and make formal decisions on implementation	Spring 2020	
If approved:		
Implementation of systems, signage and other infrastructure	Summer 2020	Autumn 2020
Scheme comes into effect	December 2020	



YOUR FEEDBACK

The easiest way to give us your views is via the [online survey](#), but you can also email us or write to us if you prefer. If you have questions and would like a response, please use the email address below. We won't be able to respond to questions submitted as part of the online survey.



www.oxfordshire.gov.uk/zeroemissionzone
www.oxford.gov.uk/zez

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Its.team@oxfordshire.gov.uk



Zero Emission Zone
Oxfordshire County Council
New Road
Oxford
OX11ND



Please respond by
Friday 31st January 2020

A printed version of the online questionnaire is available if you'd like to give us your views by post. This document and the questionnaire are also available in the following formats:

- Easy Read
- Other languages
- Large print
- Other printed and electronic formats

Please call us on 01865 792422 or email Its.team@oxfordshire.gov.uk if you'd like any of these.

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CONNECTING
OXFORDSHIRE

