

WEST YORKSHIRE BUS EMISSION STRATEGY

1. Policy Context

The West Yorkshire Local Transport Plan (WYLTP) is a 15 year strategy for 2011 to 2026.

The vision of the plan is:

MyJourney West Yorkshire Vision 2026 - Connecting People and Places	
Working together to ensure that West Yorkshire's transport system connects people and places in ways that support the economy, the environment and quality of life.	

The objectives are:

1	Economy. To improve connectivity to support economic activity and growth in West Yorkshire and the Leeds City Region.
2	Low Carbon. To make substantial progress towards a low carbon, sustainable transport system for West Yorkshire, while recognising transport's contribution to national carbon reduction plans.
3	Quality of Life. To enhance the quality of life of people living in, working in and visiting West Yorkshire.

The strategy in WYLTP has six big ideas. The most relevant to a bus emissions strategy is big idea 3:

3. **Investment in low-carbon** modes of travel by supporting the development of infrastructure for low-carbon methods of travel, such as electric trains, 'Park-and-Ride', buses, tram-train, trolleybuses, walking and cycling.

This Strategy sets out the approach WYCA will take in the short and medium term to support this objective.

2. Bus Emissions Strategy

Diesel buses are a major contributor of CO₂ and air borne particulates especially in town and city centres. Buses are also crucial to the economic sustainability of town and city centres.

This strategy seeks a year on year reduction in the negative impact on air quality in West Yorkshire caused by buses.

The objective that each brand new bus introduced into the West Yorkshire fleet should deliver improved environmental performance than the vehicle it replaces.

Meeting this objective will require

- Commercial bus operators to invest in buses with improved environmental performance
- WYCA and other public bodies to use their purchasing power to drive up emission standards through service procurement
- Vehicle manufacturers, bus operators, WYCA and other public bodies to pilot the use of new technologies
- Public and private sector partners to work together to secure additional funding to advance the strategy
- Bus operators to encourage their drivers to adopt a driving style which prevents excessive emissions

3. Commercial Bus Operators' Role

Since 1986 the bus market in the UK outside London has been deregulated. This means that most bus services are run commercially by operators who are answerable to shareholders to deliver profits.

In West Yorkshire, the bus market is dominated by a small number of big players. First operate over 50% of the mileage and carry over 60% of passengers with local monopolies in Bradford (City), Calderdale, Leeds and South Kirklees. Arriva (including Yorkshire Tiger) have around 25% of the market with local monopolies in Wakefield and North Kirklees. Transdev have around 8% of the market with a local monopoly in the Keighley area.

Over 90% of passengers are carried by the “big three” operators.

As most services are run commercially, fleet investment is in the main decided by the perceived return that that investment would generate. The availability of capital per se also affects investment. This tends to lead to more conservative investment decisions where there is certainty of the planned return being achieved.

Investment in fleet in West Yorkshire by bus operators in recent years has been extremely variable. In 2010, 2011 and 2013 less than 2% of the fleet was replaced each year whereas in 2012 there was almost 9% fleet replacement.

In relation to Euro standards, WYCA estimates the current percentage fleet composition as follows:

Euro Standard	%
0	2.5
1	4.8
2	25.3
3	20
4	26.4
5	21.1

On a wholly commercial basis there has been no investment in emerging technologies in West Yorkshire by bus operators. In 2011 and 2012, DfT grant funded operators to partially cover the additional cost of introducing diesel/electric hybrid buses. These grants were taken up by First and Arriva who brought in hybrids into West Yorkshire. Currently there is no evidence that this investment will continue without continued public sector support.

There has been no appetite amongst bus operators to invest in all electric buses as they are perceived not to be currently economically viable (at present) by the industry on commercial services.

Smaller Bus Operators

It should be noted that small bus operators have generally the oldest fleets with buses that emit higher emissions. However they tend not to have adopted new technologies due to

- Lack of availability of capital
- Lack of expertise
- Lack of fleet stability

WYCA currently has a scheme for small operators to invest in new ticket machines to enable them to go smart and enter the real time system. The feasibility of using a similar mechanism to roll out eco driving technology will be investigated.

4. WYCA's role

The West Yorkshire Combined Authority (WYCA) has a wide range of functions and objectives with an overriding objective of supporting economic development within the Leeds City Region. This is also the key objective of the current three year implementation plan of the West Yorkshire Local Transport Plan (LTP).

There is the potential for tension between the objective to reduce the impact of bus emissions and the contribution buses make to the local economy. Options such as limiting access by older buses to city centres will impact on accessibility to employment and the sustainability of town/ city centre retail and leisure activities.

Service Procurement

WYCA can influence bus service quality and delivery (including emission standards) through its power to procure services.

Under the 1985 Transport Act WYCA has the power to tender for bus services that are socially desirable but not commercially viable. The main categories of services that this includes are:

- Temporal extensions of commercial services (such as early mornings, evenings and Sundays on services that are viable at other times)
- Services to areas of low and dispersed demand (such as rural and urban fringe)
- Services for those who are mobility impaired and cannot use conventional bus services (mainly AccessBus)
- Free bus services in towns and cities (to improve accessibility and link transport nodes)
- Home to school transport (including MyBus Yellow Bus services)

Around 10% of bus mileage within West Yorkshire operates under contracts issued by WYCA. This percentage has declined in recent years as a result of funding reductions.

In the case of AccessBus, city/ town centre shuttle services and MyBus (yellow school buses) WYCA owns the buses and supplies them to operators under contract. For almost all other services operating under contract, bus companies supply buses to a standard specified by WYCA.

WYCA now spends around £20m per annum supporting bus services (a 30% reduction in real terms over the funding available before the recession and the government's austerity programme). There is little prospect of an increase in spending on public transport from revenue budgets over the next few years.

The revenue funding position currently limits the Authority's ability to use its spending power to influence uplifting environmental standards.

Future Development

The West Yorkshire Transport Fund which is currently under development includes a comprehensive and substantial upgrade of all 'core' routes across West Yorkshire to reduce congestion, improve reliability and speed up journey times. The bus element is targeted at reducing operating costs by reducing journey times, converting the bus fleet to low carbon and improving passenger information.

WYCA and Leeds City Council are developing "NGT", an integrated rapid transport network for Leeds, to support the city's future development, transform public transport and offer a real and attractive alternative to car travel. The scheme is designed to reduce congestion as commuters switch to public transport, resulting in a cut to carbon emissions

WYCA is in discussion with bus operators regarding proposals for a Quality Bus Contract Scheme where the bus network would be operated under franchise to the WYCA. This would give WYCA the power to set emissions standards on buses on all

services. Operators have offered alternative partnership proposals that are under consideration by WYCA.

5. Recent successes and initiatives

Most recent successes have been gained through the deployment of grant funding schemes

- Both Arriva and FirstGroup were successful in 2011 and 2012 in grants from DfT for hybrid bus technology. Arriva have deployed 12 hybrids on services linking Castleford and Leeds. FirstGroup have introduced 22 hybrids on services within the Leeds City area.
- In 2013 WYCA was successful in receiving funding from DfT through the Clean Bus Technology Fund for the fitting of 119 of its Yellow buses with SCRT and NOx filtration technology. WYCA received almost £1m which has been partially match-funded by the Authority.

The award from DfT was the largest single award to any Local Authority. All the 119 buses have been fitted with the kit by summer 2014, significantly improving air quality for some of the most vulnerable groups within society – children. WYCA has also received funding to convert a further 23 buses by the end of 2014/15.

- Both FirstGroup and Transdev have equipped all their buses within West Yorkshire with “Greenroad”, a system that monitors driver performance with the aim to reduce fuel consumption and accidents and improve ride quality for customers. Drivers can receive instant feedback on their performance via an app. Arriva are also trialling this system in Castleford. Typically these systems achieve a 10 to 15% reduction in fuel usage (and thereby emissions).

6. WYCA Implementation

Scope

WYCA will use its influence to reduce emissions from buses and may deploy funds to assist this where it is lawful to do so and where there is a positive business case.

The scope for WYCA to improve the environmental performance of the bus fleet is as follows:

- **Bus services operating under contract using WYCA owned buses**
- **Bus services operating under contract using privately owned buses**
- **Use of statutory powers to influence change**
- **Financial intervention in the market**

Bus services operating under contract using WYCA owned buses

WYCA directly owns a small fleet of buses which are deployed to bus operators to deliver services on its behalf and will seek to improve emission standards through its vehicle replacement and refurbishment programme.

- **Subject to the availability of funding and a robust business case, WYCA will seek to invest in more vehicles exceeding statutory emission standards when replacing existing assets**
- **WYCA will complete the fitment of SCRT and NOx filtration to its fleet of MyBus school buses and other vehicles within its ownership**
- **WYCA will pilot, where appropriate and financially viable, new technologies to encourage the commercial market to move to more sustainable low carbon technologies**
- **When funding new vehicles, whole life environmental performance will be a quality factor in evaluating tender bids.**

Bus services operating under contract using privately owned buses

These services form the bulk of WYCA's contracts in terms of both mileage and cost. WYCA has in the past influenced bus operators, through contractual obligations, to adopt new technologies that then have wider benefit on commercial services.

Examples of this are that WYCA encouraged the early adoption of fully accessible buses by making it a contractual obligation from January 2012, fully three to five years before this was a legal requirement. As a result of this policy most vehicles providing supported services are Euro 3 or better. Similarly, from January 2013 all new contracts have to have buses equipped with the capability to accept smartcards and provide a feed to real time information.

Bidders for contracts will factor the cost of complying with higher standards into their tenders resulting in increased revenue costs for WYCA. This risk can be reduced by identifying these requirements several years in advance to enable bus operators to factor the requirement into their investment programmes and to plan ahead for the change.

Given the pressure on WYCA revenue budgets, it is not proposed to mandate higher contractual emission standards.

WYCA can also encourage bidders to offer higher than the contractually prescribed standards in the form of "added value" to their bid (in practice proposing the use of higher specification buses). These proposals will give the bidder advantage in the tender evaluation process. Award of the contract would be conditional upon meeting the promised standard. It is proposed to adopt this approach to encourage higher standards through the tender process.

- **Where a price/quality matrix is deployed, WYCA will use environmental performance as a quality factor in evaluating tenders to operate bus services**

Use of Statutory Powers

WYCA is not the regulatory body for bus services and cannot therefore mandate higher emission standards on commercial bus operators.

Local authorities may seek to use powers to impose higher standards on the bus industry through Low Emission Zones. Care is needed in this regard as the industry may seek to offset the additional costs of complying with the standard by an increase in bus fares and/or the withdrawal of services.

WYCA is required by statute to produce a bus strategy and has identified a progressive improvement in environmental performance as a key objective. WYCA is encouraging the bus industry to develop a collective strategy to improve performance as part of a voluntary partnership with WYCA.

Whilst retrofitting existing buses can offer a lower cost short term air quality benefit, this approach does not offer long term passenger benefits. WYCA will encourage bus operators towards fleet investment to improve environmental performance rather than refurbishment

If the industry is unwilling or unable to deliver the bus strategy, it is the policy of WYCA to apply to adopt Statutory Quality Partnership or Contract powers which would deliver bus services within a more contractual environment. Bus operators could be required to comply with prescribed emission standards under a Quality Contract/ Partnership.

- **WYCA will seek to improve bus emission standards in partnership with the bus industry.**
- **WYCA will encourage bus operators towards fleet investment to improve environmental performance rather than refurbishment**
- **In the event that WYCA adopts statutory Quality Contracts or Partnerships, a business case for the inclusion of higher bus emission standards will be developed.**

Financial intervention in the market

WYCA's ability to invest in buses for use on commercial services is constrained by State Aid rules. These constraints are partly mitigated if the investment is made within a contractual environment such as a Quality Contract.

WYCA is developing the West Yorkshire Plus Transport Fund, a package of up to £1bn of transport investment over the coming 20 years. A scheme is being developed within the Fund to deliver a step change in the environmental performance of the bus fleet subject to a satisfactory business case.

WYCA will actively participate in central Government and other third party funded programmes to invest in improved environmental performance for buses such as the Green Bus Fund.

WYCA's approach will seek to maximise the benefit of any investment on improved emission standards. As such there is a presumption against funding small scale demonstration or experimental projects. Notwithstanding this, WYCA will utilise opportunities to secure third party funding to facilitate such projects.

In the area of smart ticketing, WYCA has supported smaller bus operators in equipping their vehicles with new point of sale equipment through leasing arrangements. The feasibility of extending this principle to the fitting of "Eco driving" equipment will be explored.

WYCA intends to:

- **Explore the feasibility of deploying funds in the West Yorkshire Plus Transport Fund to improve bus emission standards**
- **Work in partnership where appropriate with District Councils and other stakeholders to develop schemes to reduce vehicle emissions.**
- **Subject to a business case and State Aid legislation, develop a scheme to partially grant fund Eco driving technology on small operators' buses**

7. On-going Review

The Bus Emissions Strategy covers an area that is subject to rapid technological change. WYCA will review the Bus Emissions Strategy on an annual basis to capture developments in both the bus market and technology.