

WLTP FUEL ECONOMY –

helping drivers choose the best car for their journeys

From 1 September 2017, cars will begin to be tested in a completely new way, giving buyers comprehensive and reliable mpg figures and helping them compare and select the car best suited to the type of driving they do.

Why do we need a new fuel economy test?

Predicting how much fuel we might use in a new car is vitally important for drivers but can be challenging. The current 'official' figures are primarily intended as a way of comparing different cars, but the test (known as the NEDC) has its origins in the 1970s and has not kept up with rapidly developing car technology, becoming less representative of 'real driving'. This has led to a significant difference between the miles per gallon reported in the official test and what most drivers achieve in normal driving. During normal driving conditions the fuel consumption can vary widely due to factors such as driving style, road and traffic conditions, vehicle options and weather etc.

With the increasing range of powertrain technologies available in today's cars, it is important that car buyers have accurate and more realistic information about the performance and capability of new cars and can make an informed decision about the best vehicle for their needs. To give a better picture of what actual fuel

economy one might expect, the automotive industry and governments have come together to develop a new CO₂ and fuel consumption test which will give more realistic and representative figures. This test will also be used to measure the emissions which affect air quality.

The new test is called the **World Harmonised Light Vehicle Test Procedure – WLTP for short.**

All new car models will be tested against WLTP starting from 1 September 2017 and, by September 2018, all new cars on sale will have WLTP test information.

Importantly, the new WLTP test will become the only truly comparable measure across every car and manufacturer which is verified by governments and certification bodies and this data should not be confused or compared with other road tests or 'real world' indices.

How have test conditions been improved under WLTP?

WLTP tests are conducted in a laboratory to ensure accuracy and repeatability, but introduce much more representative testing conditions based on data from 'real driving' and will provide a more accurate basis for measuring emissions and calculating a car's fuel consumption.

This will provide consumers with more detailed and realistic car performance data. The new test involves a significant number of key changes compared to the 'old' NEDC test.

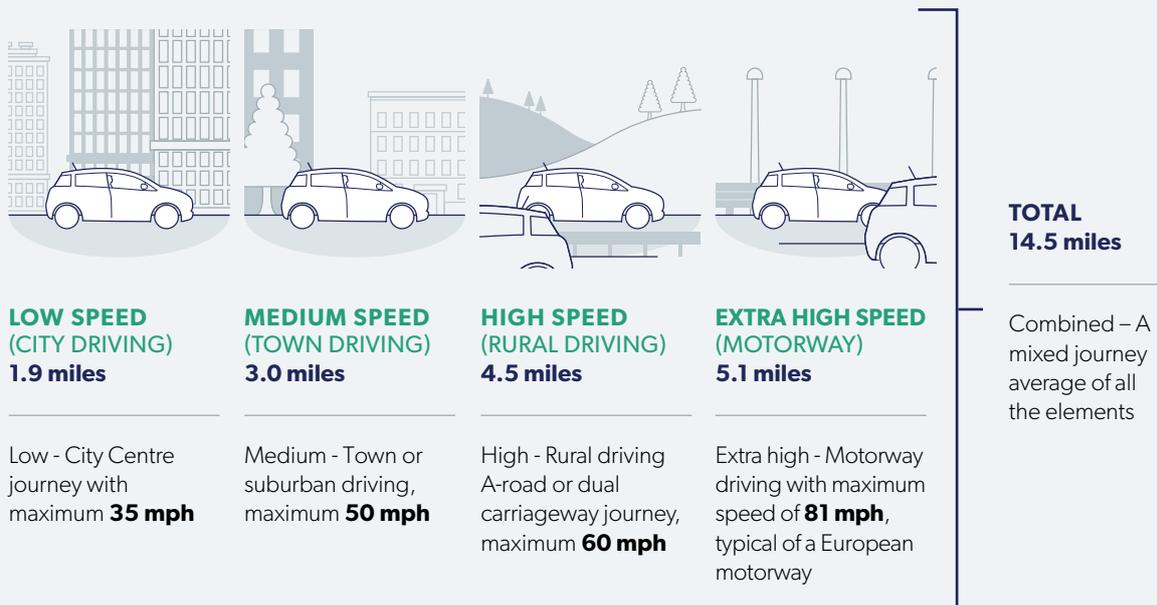
What new data will we see for WLTP tested cars?

Fuel consumption values will be presented for four different driving conditions with an overall combined figure for **petrol, diesel, hybrid and plug-in hybrid cars**. Each of these elements is based on the typical types of journeys made by drivers.

NEDC TEST



WLTP TEST



Low - City Centre journey with maximum **35 mph**

Medium - Town or suburban driving, maximum **50 mph**

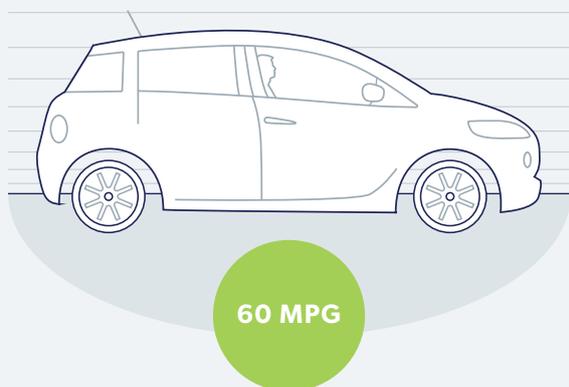
High - Rural driving A-road or dual carriageway journey, maximum **60 mph**

Extra high - Motorway driving with maximum speed of **81 mph**, typical of a European motorway

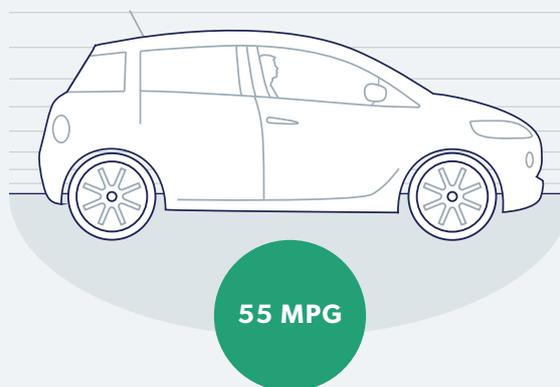
These figures are designed to help consumers understand which technology and vehicle is best suited to their driving and journey patterns.

The new test places more emphasis on the detailed vehicle specification than the old test when determining fuel consumption and CO₂ emissions. The recognition of factors such as the exact mass and aerodynamics of the vehicle, the rolling resistance of the tyres and the impact of options fitted to the car by the manufacturer is greatly improved to give a more accurate set of values for an individual vehicle. Drivers will be able to better understand how any options including wheels, tyres, panoramic roof, or any additional weight such as alarms, parking sensors, electric seats etc might affect fuel consumption.

EXAMPLE WLTP FUEL ECONOMY OF VEHICLE WITH NO OPTIONS, AND SMALL WHEELS AND TYRES



EXAMPLE WLTP FUEL ECONOMY OF VEHICLE WITH OPTIONS SUCH AS LARGE WHEELS AND TYRES



Most cars tested under WLTP are likely to show higher CO₂ emissions and lower fuel economy figures than the same car tested under the old NEDC test. This reflects much more accurately day-to-day driving, however the actual on-road consumption is completely unaffected by the test type.

Manufacturers and the Government's Vehicle Certification Agency are expected to progressively start showing WLTP car performance figures on their websites from late 2017, as new models are approved.

Why will WLTP type approved cars still have NEDC fuel consumption and CO₂ figures?

Cars tested under WLTP will also have their NEDC CO₂ and fuel consumption values reported until 2020. Manufacturers must also continue to use the NEDC CO₂ figure when reporting their fleet average CO₂ emission performance for new cars (which were set against NEDC, until 2020/2021).

What happens with vehicle tax?

Cars approved under the WLTP will continue to be taxed against the NEDC CO₂ emission value, so there is no change to the CO₂ based taxation systems in the short term. This includes vehicle tax (VED) and company car tax (BIK). It is not expected that any structural changes will be made before 2019.

Timetable of Changes Expected

FROM 1 SEPTEMBER 2017

New car models approved using WLTP

- Taxation continues to be based on NEDC CO₂ emission figure
 - Car labels and printed marketing material show NEDC fuel consumption and CO₂ values, as well as electricity consumption and electric range
 - LowCVP work continues to develop standardised consumer presentation
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FROM EARLY 2018

WLTP data available for a range of vehicles

- LowCVP publishes consumer guidance with coordinated industry supported approach
 - Using new WLTP data, proposals for policy transition begin to be developed
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FROM 1 SEPTEMBER 2018

All new cars produced have WLTP information available

- Taxation continues to be based on NEDC CO₂ emission figure
 - Car labels and printed marketing material show NEDC fuel consumption and CO₂ values
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FROM 2019

Policy transition proposed by European Commission

- Taxation and CO₂ related policy switches to WLTP CO₂ emission figures
 - Car labels and printed marketing materials adopt WLTP fuel consumption and CO₂ values
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Further information

ACEA www.wltpfacts.eu
LowCVP www.lowcvp.org.uk

SMMT www.smmt.co.uk
VCA www.dft.gov.uk/vca