ingear@sunday-times.co.uk

Google's high-rollers gamble on driverless cars in Vegas

in City is about to get ven naughtier. Google self-driving robot cars legalised in Las Vegas, leaving drivers free to text at the wheel, gamble online or even drink and "drive".

The secret project, codenamed Chauffeur, has been in development for the past 18 months. However, details of the technology giant's plans have emerged with the publication of two bills being considered by Nevada's state assembly.

One seeks to open the way for robot cars and taxis to cruise Las Vegas's famous Strip. The other



Google has a robot car fleet of sev Tovota Priuses and one Audi TT

autonomous cars from a new law banning texting at the

self-driving cars has been around for years, this is the first time that the proposal has been held up to real-world scrutiny. If the law is changed in Nevada, it could pave the way for more widespread acceptance of

The biggest obstacle is the question of who is legally responsible for the vehicle should it be involved in an accident. Google has proposed that the new law would allow drivers to hand over legal

responsibility to self-driving vehicles, even to the point of being held blameless if the car should crash while they were talking or texting on a mobile. One of the bills states

that "a person shall be vehicle if the motor vehicle is driven

If this were to be accepted, it would be the biggest change in motoring law history – Although the idea of essentially divorcing the 'driver" of the vehicle from legal responsibility for it.

> One of Google's main arguments in favour of autonomous vehicles is that computerised cars, immune to aggression, distraction and road rage, will actually

"We believe our technology has the potential to cut road deaths, perhaps by as much as half," said Sebastian Thrun, the Google researcher in charge of the Chauffeur

Google currently has eight autonomous vehicles in its fleet - seven Toyota Priuses and one Audi TT. They work by using a rapidly spinning 3-D laser scanner on the roof, backed up by radar units, motion detectors, video cameras and GPS satellite navigation to build up a picture of the road ahead.

An onboard computer then electronically controls the car's acceleration, braking and



In more than 140 000 miles of test drives. Google's cars have

nad only a single accident when a robotic Prius was rear-ended at a traffic light by a

General Motors, which is working on similar technology, claims the idea is still years away from practical application.

"I don't think we're ready yet to introduce autonomous vehicles in an uncontrolled environment such as a regular city or even a motorway," said Chris Borroni-Bird, director of advanced technology vehicle concepts at GM. "It's really a vision of what might be possible

However Google is not prepared to wait that long. Thrun believes that the company's technology will be found in new cars within just eight years, and Chauffeur robo-cars have already been spotted cruising the Las Vegas Strip as part of a trial run.

discomfort to other persons

test, and I for one would

This can only be a subjective

happily give evidence that they

Department for Transport would

- if indeed they have ever been

ause me much discomfort

when facing them. I find it

give type approval to such a

retrograde step in road safety

astonishing that the

using the road".

Mark Harris

LETTERS

Tax hrake

Re "Come to Venezuela: fuel is 1.4n a litre" (News, last week), at least David Cameron can claim that Britain is in one top decile of the world, if only in the extent of fuel taxes. These may give the government a warm green glow, but they impact on the spending power of consumers and create a double whammy by feeding directly into food costs. which, according to the governor of the Bank of England, are the most savage economic deflator.

Fuel taxes also feed directly into reducing other government revenues as economic activity stalls and unemployment increases. Lowering fuel taxation might well reduce the state's income. but more iobs and increased financial growth could make up that loss surprisingly quickly.

Mary Dendy, Great Warford, Cheshire

I had to smile last week when I ead the quote "unsurprisingly, the cheapest petrol is in oilproducing countries". I have always thought Britain was an oil-producing country. Perhaps

Jeff Elliott. Catterick Garrison North Yorkshire

Diesel's hidden promise

article "Shocking cost of the electric dream", batterypowered cars are neither green, nor efficient, because of their reliance on fossil fuel generation, which is usually less thermally efficient than the modern car engine.

Electric motors are, however. efficient users of energy and have the great advantage of having only a single moving part. The problem is supplying the energy: today's batteries still have similar range and charging impediments to those of the first battery-driven vehicles.

A small diesel generator and back-up battery offer the advantages of electric power with the range and existing infrastructure benefits of the conventional car. Diesel electric buses are running in Manchester, and the diesel electric train has been the mainstay of the world's railways for 80 years, so the technology is already highly

A sane government would be investing in this world-beating technology rather than encouraging people to purchase prospectus larded with transient tax advantages

Dr Ranseed Bhutta, Coventry

I have just opened my Sunday papers and delved straight into InGear (as is my wont) but once again have been disappointed to find the motorcycling article missing for the umpteenth

Whatever has happened to this excellent column by Geoff Hill, whose (once regular) informative and interesting articles I enjoyed reading almost as much as those by Mr

Thanks for the rest of InGear, though, which continues in its usual eclectic style: I bought the Vita Audio DAB music system solely on your recommendation (as best sound) and am still amazed by its sound and

Tim Milton, via email

Editor's note: Geoff will return

Light speed

Peter Rust writes ("Lighting the way". Letters, last week) that synchronised traffic lights have worked to slow speeders. This is only partially true, as the lights he mentions in Slough were "beatable" by travelling at

60mph — or twice the speed limit. Or so I am informed. David Lewis, Brent, London

Nata sale

The Driver and Vehicle Licensing Agency (DVLA) relies on the Road Vehicles (Registration and Licensing) Regulations' infamous regulation 27 — a statutory nstrument — as the legal basis for selling personal data to anyone with a "reasonable cause" ("The stealth wardens out to fine you £150". News, May 8) The problem is that it is the DVLA that decides what is

The DVLA claims on its website that each request for personal data is checked carefully". In fact, most are not checked at all because the data are taken automatically via an electronic link. The DVLA also claims that it has a legal duty to disclose personal data. This is not true. The regulation says that the DVLA 'may" disclose data rather than

The DVLA says that if it does not disclose the personal data, it can be taken to court, but that is precisely what should happen, so the courts can decide what is reasonable, not the DVLA acting as judge and jury

We are also in discussion with the European commission about the compatibility of regulation 27 with European

not compatible and therefore

Paul Morris, The Data Protection

Lack of protection With regard to the editor's note to your correspondent Eric Tomlin, which explains that motorists cannot stop their details being sold by the DVLA ("Too much information". Letters, last week). Does this mean, therefore, that the DVLA is exempt from the Data Protection Act?

Chris Puttick, Cranham, Essex

Bright lights

Cars with xenon headlights ("Fight to end menace of dazzling xenon headlights", News, May 8) may be getting through the MoT test but they nonetheless are in contravention of the Road Vehicles Lighting Regulations. which prohibit "headlamps used so as to cause undue dazzle or



submitted for approval. Allan Makinson, Burnley

I nw nnininn

The reply to the query about the merits/demerits of low-profile

tyres (Car Clinic, last week) made no mention of how they make tyres and wheels far more susceptible to damage, both minor (scraped alloys) and major (destroyed tyres) from kerbs and potholes With 19in wheels on my

Jaguar XF, I "wrote off" two barely worn tyres when on each occasion the rim sliced a 4in lump out of the surface of the side wall. In neither case did the tyres deflate but they had to be replaced at £190 each

Dr John Myatt Denchworth, Oxfordshire

Email letters for publication to ingear@sunday-times.co.uk. or write to InGear, The Sunday Times, 3 Thomas More Square, London E98 1ST, including your name, address

I'm afraid I have to charge you: police unleash electric patrol car

oftly, softly: here come the electric police. Thames allev is to become the irst force in Britain to start patrolling in a whisperquiet, battery-powered car that in order to preserve charge, will not feature either a siren or a blue flashing light

The Mitsubishi i-Miev. complete with police livery, will be on the streets of Milton Keynes from next month. Other forces have tested electric cars but this is believed to be the first to be bought. It will be used to police neighbourhoods and city centre streets rather than as a high-speed response car.

Thames Valley describes it as a landmark event for police fleets and says that the car's small size makes it perfect for urban patrols. It has a range of only 93 miles but will not be required to travel further than about 50 miles a day. If an officer finds that his i-Miev has run flat while on the beat, the

vehicle can be recharged to 80% in just 30 minutes from a regular domestic 240V supply. [car] is not only necessary to

However, its performance

may give some hope to cycle-riding hoodies. The i-Miev takes a full 13 seconds to reach 62mph. "This is not a highspeed response vehicle: it is a patrol vehicle," says David McDonald, the fleet manager of Chiltern Transport Consortium, which provides cars for several forces, including Thames Valley, Bedfordshire and Hertfordshire

> vears, through savings on fuel costs. It will be recharged overnight from a standard plug at the local police Other forces, including Hampshire and Central Scotland, are understood to be considering adding electric cars to their fleets

> > ithin the next few months

has its benefits. "We believe this

protect future generations from

warming," says McDonald, "but

also to protect the public purse

relentless rise in fuel prices in

The purchase price is barely

less than that of a conventional

patrol car, however. The i-Miev

cost the force £23,990, and that's

government grant available to

McDonald calculates that it will

break even within six to eight

after deducting the £5.000

buvers of new electric cars.

the worst effects of global

from the inevitable and

the coming years."

The Porsche 917 driven by Steve McQueen in the 1971 film Le Mans was at

Sixties supercars swing to Chelsea beat

ini Coopers and niniskirts will be the rder of the day at this vear's Chelsea AutoLegends event in Londor

A parade of exotic cars will weave its way through the capital to the show, which promises fans a trip down nemory lane with some of the stars of the 1960s alongside up-to-date supercars.

As well as classic racing and road cars, the Bugatti Veyron Super Sport, Ferrari 599 GTO and McLaren MP4-12C will be there.

The theme is the Swinging Sixties, inspired by the 50th hirthdays of the Mini Cooper and Jaguar E-type, Look out for the classic Ford GT40 and the blue Ferrari 250 GT SWB that sped

Stirling Moss to victory in the 1961 Tourist Trophy at Goodwood. Organisers are also searching

for visitors with unusual cars to display at the event, to be held on September 4 at the Royal Hospital Chelsea, Such entries last vear included a Volkswagen camper van, Austin Healeys, Triumphs and Sunbeams. Visitors will be encouraged to

dig out their kaftans, miniskirts and bell-bottoms to bring the Sixties theme to life.

With 500 cars and about 15.000 visitors, the show, which is supported by The Sunday Times, promises a unique atmosphere where racing drivers and celebrity petrolheads mix with fans. Last year they

Kay, of Jamiroguai, and Pink Floyd's Nick Mason. A string of Le Mans racing drivers also attended, including Derek Bell who won five times, and Moss

cars," said Moss. "It's an amazing automotive festival with something for everyone. Tickets for the motoring spectacular are on sale at

"The great thing about the

show is that it's not just racin

chelseaautolegends.com. Advance prices are £15 for adults and £10 for ages 12-16. Children under 12 get in free. Organisers have just one

difficulty: plotting a supercar route that avoids London's ruinous speed humps.

Traffic lights to put the brakes on speeding

rivers who speed will be punished by being forced under a pilot scheme that could be adopted across the

Swindon will be the first place in Britain to implement the system, which uses sensors in the road to monitor motorists' speed. If a car is breaking the speed limit, the next set of traffic lights are instructed to turn red, bringing the speeding car, and the vehicles behind it, to a halt

Equipment will be installed this autumn in one road where more than two-thirds of cars are estimated to speed, and in another where more than a third of vehicles are said to break the limit. The sensors will control traffic lights already installed at junctions

too common, Ferrari's

can help. It builds one-of

wealthy that an off-the-

Superamerica 45, right, is a 599 GTO restyled with

nterior. Peter Kalikow, an

nerican property tycoon

shelf car is vulgar. The

carbon fibre and a new

commissioned the multi

ook away the tooling to

nsure it remained unio

Numberplate recognition cameras will ensure emergency vehicles are given a green light.

"I have been talking about this with my team for about two years," said Peter Greenhalgh, Swindon council's cabinet member responsible for planning and transport, "I have seen it in Spain and France and it seems to work really well, and [I] couldn't see why we were not doing it in the UK. It is an intelligent way of managing traffic flows and ensuring that cars drive in a safe manner

He added: "The whole key is to monitor driver behaviour without beating them over the head. It may annoy them, but I think eventually people will work constant speed at or around the speed limit then actually their journey times will be much shorter because they won't be getting delayed by traffic lights."

In 2009 Swindon became the first council in Britain to switch off its speed cameras. saving the money could be better spent on other safety measures. Since then the Conservative-controlled council has been working on an alternative that hitting drivers' pockets. If the scheme is a

success, the council said it could be extended to all Swindon's 200 junctions with traffic lights. The Department for Transport said it would



Open Weekens













