

Road Safety Factsheet

April 2019

Single Double British Summertime

In the UK, clocks follow Greenwich Mean Time (GMT) from October to March and British Summer Time (BST), which is GMT + 1 hour from March to October. Most of Europe follows Central European Time, which is one hour ahead of GMT in winter and 2 hours ahead of GMT in summer – always one hour ahead of the UK.

One of the consequences of the UK's system is that more people are killed and injured on the road because of darker evenings in the autumn and winter than would be if we adopted Single/Double British Summertime (SDST).

SDST would mean that we adopted GMT+1 during the winter months, with GMT+2 being applied to the summer period. This would create lighter evenings all year round and result in fewer people being killed and injured in road accidents. It would also bring significant environmental, economic and health benefits, the latter being particularly relevant to public health concerns about obesity. This change would also align the UK with the Central European Time Zone, which would bring additional business benefits.

The Road Safety Problem

During the working week, casualty rates peak at 8am and 10 am and 3pm and 7pm, with the afternoon peak being higher for both. Road casualty rates increase with the arrival of darker evenings and worsening weather conditions. Every autumn when the clocks go back and sunset occurs earlier in the day, road casualties rise. The effects are worse for the most vulnerable road users like children, the elderly, cyclists and motorcyclists.

In 2017, pedestrian deaths rose from 37 in September to 46 in October, 63 in November falling slightly to 50 in December. The casualty rate for all road users increased from 520 per billion vehicle miles in October to 580 per billion vehicle miles in November.¹

The relative peaks are explained by several factors:

- Motorists are more tired after a day's work and concentration levels are lower
- Children tend to go straight to school in the morning but often digress on their way home, increasing their exposure to road dangers
- Adults tend to go shopping or visit friends after work, increasing their journey times and exposure to road dangers
- Social and leisure trips are generally made in the late afternoons and evenings.

These factors explain why a reduction in the evening accident peak produces more significant results than a reduction in the morning accident peak. Moving to SDST would produce significant net benefits – although there would be a slight increase in the morning accident peak, this would be more than offset by the reduction in the higher evening peak.

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The Benefits of Changing to Single/Double Summer Time

The most recent research estimates that adopting Single/Double Summer Time would have the net effect of saving around 80 lives and 212 serious injuries a year.ⁱⁱ Although this estimate is now quite old, it did confirm earlier research which showed that the 1968/71 experiment, when British Standard Time (GMT + 1) was employed all year round (the clocks were advanced in March 1968 and not put back until October 1971) saved around 2,500 deaths and serious injuries each year of the trial period.ⁱⁱⁱ

In 2009, the Department for Transport's consultation paper, "A Safer Way: Making Britain's Roads the Safest in the World"^{iv}, confirmed that moving to lighter evenings would prevent about 80 deaths on the road a year. There would be a one-off cost of about £5million to publicise the change but then benefits of around £138million per year, as well as energy savings, business benefits and more opportunities for sport and leisure.

Also in 2009, the National Audit Office published "Improving Road Safety for Pedestrians and Cyclists in Great Britain".^v In a section looking at seasonal road casualty patterns from 2000-2007, the report stated that there were 10% more collisions killing or injuring a pedestrian in the four weeks following the clocks going back than in the four weeks before the clocks changed.

The Public Accounts Committee recommended that "The Department [for Transport] should take the lead in re-examining the practice of changing clocks at the end of British Summer Time with other central Government departments."^{vi}

Other benefits

The move to SDST would cost the UK very little in monetary terms, but the benefits would be far-reaching, and would cover a wide range of sectors.

Environment

It has been estimated that a switch to Single Double British Summertime would reduce CO₂ pollution by at least 447,000 tonnes each year, the equivalent to more than 50,000 cars driving all the way around the world.^{vii} According to a Cambridge University study, moving to SDST would cut carbon emissions by 450,000 tonnes each year. The energy saved would be equivalent to the annual domestic electricity consumption of 2/3 of Glasgow and 85% of all the power generated by wind, wave and solar renewable energy in England.^{viii}

Business

SDST would align the UK working day with continental Europe's for more effective working, including travelling on the day of meetings leading to fewer overnight stays. At present, the UK market loses an hour of overlap in the morning with Europe and an hour overlap in the evening. Both of these would be removed, increasing overlap by 25% of the working day. Stock market hours would match Europe, and produce a greater overlap with Asia – and although it would mean a reduced overlap with North America, the EU accounts for well over half of the UK's foreign trade (much more than North America).

Health and wellbeing

SDST would bring an average increase of 28% more accessible daylight during waking hours, maximising the beneficial effect of natural light – summer sunlight is our primary source of vitamin D. Because of this, Seasonal Affective Disorder (SAD) and sub-clinical depression, suffered by 500,000 people in the UK, would be reduced by this extra hour of accessible daylight. Extra daylight hours for leisure activity would help fight increasing obesity in UK society, particularly among the young.

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Tourism

Changing to SDST would bring a substantial financial boost to Britain's £billion tourism industry. It would extend by two months the part of the tourist season that is dependent upon daylight hours, and enable later closing of tourist facilities – useful as the demand for facilities is greater after lunchtime. A Policy Studies Institute study^{ix} suggests that there would be extensive benefits to tourism because Daylight Saving would:

- Allow an extended tourism season.
- Boost UK inbound tourism by an estimated £1bn per annum.
- Boost overall tourism earnings by an estimated £3bn.
- Increase jobs to cater for increased growth by 60,000 to 80,000.

SDST would increase the attraction of off-peak and short-break holidays, simplify international timetables, and bring benefits to airlines, cross-channel ferry and rail operators.

Leisure

SDST would bring a shift in average sunset time year round from 6.35pm to 7.30pm giving an average gain of 55 minutes of “accessible” evening daylight every day of the year.^x

More evening daylight would encourage outdoor activity, making outdoor leisure activities possible in the evening during two more months of the year – people spend about 60% more time watching TV in winter than in summer. In 2009, a YouGov poll^{xi} found that:

- 2 out of 3 people asked would support the change
- A third of those asked believed it would improve their wellbeing
- Almost half would use the extra time on extra leisure and sporting activity
- When asked directly, only 11% expressed any concern for farming

It would stay lighter and warmer later each day, making it possible to enjoy more evening meals and drinks outdoors – and SDST would be welcomed by organisations representing the interests of Britain's 2-3million keen gardeners.

The elderly

The UK's ageing population would benefit from this change. Older people generally do not leave their homes until after the rush hour (10am onwards) and are 'curfewed' by the onset of darkness in the evening. This is determined by several factors including fear of crime, fear of slips, trips and falls and the end of concessionary fare periods. Enabling older people to be out and about later would improve their health and wellbeing, helping to keep them fitter later in life which would reduce their dependence on others, including the state.

Crime

A move to SDST would reduce opportunistic crime facilitated by the cover of darkness – over half of criminal offences take place during the hours of darkness in the late afternoon or evening and, of the small proportion of offences occurring in conditions of semi-darkness, far more occur at dusk than dawn (Home Office British Crime Survey 1988-1992).

As well as reducing crime itself, it also reduces the fear and cost of crime.

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Opposition to the Change

Some people are still cautious about accepting SDST. In the past, a move to SDST has been opposed by those industries whose workers rise early and utilise morning light, for example some farmers, those who collect and deliver milk, the building industry and postal workers. There is now increasing evidence that these objections are less relevant. For example, postal workers deliver mail later in the day than when the 1968/71 experiment took place. Modern farming methods have also reduced the impact on farmers, with many now neutral or positive about this proposed change. In Scotland, the National Farmers' Union position is no longer opposed to the change, as it was in the past.

In Scotland, there has been opposition to the change. A 2005 MORI poll suggested that only 40% of Scots were in favour of the change, with the main points raised being:

- 'This is something which would benefit the English, not the Scottish.'
This is not true: in all the major dimensions measurable – road safety, environmental benefit and fuel cost, tourism, health and wellbeing – Scotland would benefit disproportionately compared to England and Wales.
- 'There is nothing that can be done – there is only so much available daylight in Scotland.'
This is not true: because Scotland has less available daylight in winter, it is more important for Scotland to manage it carefully, because it is a more precious resource. This fine-tuning is required to get the most benefit out of the available daylight north of the border.
- 'It would make sense for England to go one hour ahead and Scotland to remain where it is.'
This is not true: apart from the devolution and consistency issues, this is a north-south issue, unaffected by time zones. If it were a significant east-west issue, there might be benefits in different countries in the UK going to different time-zones.
- 'More children will die because of the darker mornings.'
This is not true: the effect of SDST is to save children's lives, even more so in Scotland than in England and Wales, because Scotland has longer, darker winter evenings, which is where the principal casualties occur.

Scottish opposition arose from the 1968/71 experiment because certain media reported an increase in child casualties in the morning, omitting to mention that the evening reduction had more than compensated for this increase. As a result, there is a widely-held belief that this would be bad for Scotland, when in fact, the opposite is true.

However, there is evidence that opinions in Scotland are changing. ^{xii}

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Summary

Since the 1968/71 experiment, it is estimated that more than 5,000 people have died and more than 30,000 received serious injuries in the UK on the roads, for no reasons other than entrenched prejudice and lack of political will.

RoSPA recommends that lighter evenings be introduced on a trial basis for 2 – 3 years (similar to experiment conducted during 1968/71). The decision about continuing permanently would then be based on the consequent effects on road casualties. This would provide objective, up-to-date evidence about the effects of SDST and also enable the public and the various industry and business sectors that would be affected to experience the change for themselves.

The House of Lords have recently discussed the European Commission's proposal to end seasonal clock changes, meaning that the UK could be in British Summertime all year round. RoSPA is calling on the UK government to consider whether the current clock change is still beneficial, or even necessary. Although RoSPA would like to see SDST implemented, a move to British Summer Time (GMT+1) all year round could save an estimated 30 lives by providing an extra hour of daylight during Autumn and Winter. RoSPA are in favour of this proposal, which is realistically achievable in the current climate.

On 26 March 2019, the European Parliament adopted its position on the Commission proposal, supporting a stop to the seasonal clock changes by 2021. Countries will be asked to choose either permanent summer time or winter time. Under the new legislation, governments opting to make summer time permanent would adjust their clocks for the last time on the last Sunday in March 2021. For those choosing permanent standard time, the final clock change would be on the last Sunday of October 2021.

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References

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