

# **Road Safety Factsheet**

October 2020

# **British Summertime (BST)**

In the UK, clocks follow Greenwich Mean Time (GMT) from October to March and British Summertime (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 abolished the clock change and adopted British Summertime all year.

The European Commission has proposed to end seasonal clock changes by 2021, meaning that member countries, would select a time zone that it would stick to year-round.

RoSPA is in favour of this proposal, and is calling for the Government to adopt British Summer Time (GMT+1) all year. On 17<sup>th</sup> October 2019, RoSPA attended the House of Lords EU Internal Market Sub-Committee, providing evidence as an expert witness. This would mean road users will no longer experience the sudden onset of darkness during their autumn commutes, potentially saving many lives. This will also mean that the country has an extra hour of usable daylight in the afternoons and evenings, which brings many other benefits.

Governments opting to make summer time permanent would adjust their clocks for the final time in March 2021.

However, given the Government's commitment that the post-Brexit transition period will end on 31 December 2020, it is unlikely that the proposal will be agreed and transposed into Member States' national law while EU rules remain binding on the UK. Should the proposal eventually become EU law, the UK will be left to decide whether to end its own clock changes in the light of its neighbours abolishing theirs.

# 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.

Furthermore, according to 2019 casualty figures from the Department for Transport, pedestrian deaths increased slightly from 33 in September to 36 in October, rising to 54 in November, and 57 in December. This shows how as the evenings get darker, the risk of an RTC increases, especially for vulnerable road users. The casualty rate for all road users increased from 427 per billion vehicle miles in October to 479 per billion vehicle miles in November.<sup>1</sup>



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 BST all year 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.

# The Benefits of Changing to British Summer Time

In 1968, there was a three-year experiment when BST was employed all year round. The clocks were advanced in March 1968 and were not put back until October 1971. Although this is now several decades ago, this period provided an opportunity to evaluate the effect of discontinuing clock changes on road traffic casualties.

Road casualty figures during the morning (7:00 am - 10:00 am) and afternoon (4:00 pm - 7:00 pm) for the period affected by time change in the two winters (1966/67 and 1967/68) before the experiment and in the first two winters (1968/69 and 1969/70) when BST was retained were analysed. The data showed that keeping British Standard time had resulted in an 11% reduction in casualties during the hours affected by the time change in England and Wales and a 17% reduction in Scotland. The overall reduction for Great Britain was 11.7%. Although casualties in the morning had increased, the decrease in casualties in the evening far outweighed this.

Overall, about 2,500 fewer people were killed and seriously injured during the first two winters of the experiment.

However, it must be noted the 1968/71 experiment coincided with the introduction of roadside breath tests and the 70mph speed limit, which may have affected the casualty reduction figures.

# The Evidential Road Safety Benefits

The RAC Foundation, with support from Road Safety Analysis, analysed STATS19 data (data the Department for Transport publishes that gives detailed information about road collisions and casualties using police reports) from 2012 to 2017 for two week intervals on both sides of the UK clock changes, comparing these 336 hour periods with each other.

It was found that during the fortnight after the spring clock change (GMT to BST), there are 74 fewer collisions per year. During the fortnight after the autumn clock change (BST to GMT), there are 278 more collisions per year (a 5.1% increase). Overall, comparing the fortnights before and after the clock changes shows that they result in an annual increase in road traffic collisions (RTCs) by 2%. It was also found that the number of road traffic collisions that occur as a result of adverse weather conditions is contiguous with the changes that occur as a result of the spring and autumn clock changes: during the fortnight after the GMT to BST change, there is





an 11.32% reduction in annual RTCs as a result of adverse weather, and an 18.93% increase after the BST to GMT change. This effect is also mirrored where pedestrians are concerned: there are on average 115 less collisions that result in a pedestrian casualty in the fortnight after the start of BST, compared to an increase of 102 following the end of BST. This evidence provides support for ending Daylight Savings Time and shows how lighter evenings mean less RTCs.

# Other benefits

Much other research has focussed on the potential benefits of a move to Single/Double Summertime (SDST). SDST would mean that we adopted GMT+1 during the winter months, with GMT+2 being applied to the summer period. However, many of these benefits are likely to be replicated to some extent if the UK were to adopt British Summertime (GMT+1) all year round.

# Older people

A move to British Summertime all year round could have a significant impact on particular groups, such as older people. 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.

# Health and wellbeing

A change to British Summertime all year round would bring an increase in accessible daylight during waking hours. Extra daylight hours for leisure activity could help to fight increasing obesity in the UK, particularly amongst the young.

# Leisure

A change to British Summertime all year round would bring a shift in average sunset time year round, meaning the UK would gain "accessible" evening daylight every day of the year.

More evening daylight would encourage outdoor activity, making outdoor leisure activities possible in the evening. It would stay lighter and warmer later each day, making it possible to enjoy more evening meals and drinks outdoors.

### **Tourism**

A change to British Summertime (GMT+1) all year round could bring a financial boost to Britain's tourism industry. It would extend 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.

### **Opposition to the Change**

Some people are still cautious about a move to permanent British Summertime. In the past, it 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.

# **Our position**

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 have previously campaigned for the introduction of Single/Double Summertime. Single/Double Summertime in Britain would mean that the clocks would still be advanced in March and retarded in October each year but during winter, time would be GMT+1 and during summer, time would be GMT+2. This would put Britain into the Central European Time Zone. To achieve SDST, the clocks would not be put back in October of year 1 and then would be advanced again in March of year 2 by an hour and then would be retarded in October of year 2 by an hour. This would then continue each year thereafter.

However, 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. A move to British Summertime (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.

Unfortunately, in RoSPA's view, following its review, the Government stated that it had "no plans to implement this proposal" after the UK's withdrawal from the EU.



References		

<sup>&</sup>lt;sup>i</sup> Department for Transport. Reported casualties and casualty rates by month, road user type and severity, Great Britain, 2019 (Table RAS30020). <a href="https://www.gov.uk/government/statistical-data-sets/ras30-reported-casualties-in-road-accidents">https://www.gov.uk/government/statistical-data-sets/ras30-reported-casualties-in-road-accidents</a>. Updated September 2020. Accessed October 2020.

ii Martin R. What is the impact on road safety when the clocks change for British Summer Time? *RAC Foundation, with support from Road Safety Analysis.* <a href="https://www.racfoundation.org/wp-content/uploads/DST">https://www.racfoundation.org/wp-content/uploads/DST</a> Collisions-2012-2017 REPORT Oct-2018.pdf. Published October 2018. Accessed October 28, 2019.