



# U.S. Daylight Saving Time Policy: Popular Opposition and Government Insistence

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**Abstract.** Daylight Saving Time (DST) is a long-standing U.S. policy aimed at extending the hours of daylight in the summer. Despite DST's historical association with energy conservation and agricultural efficiency, contemporary public opposition is growing, with concerns ranging from health effects to social disruption. This paper examines the evolution of DST in the U.S. and current public opposition by summarizing data from national surveys and health studies. In addition, the paper examines the reasons U.S. policymakers support DST, including energy conservation and harmonization with international standards, as well as the political factors that influence the policy. While public opposition grows, the government continues to maintain DST, and future adjustments should require consulting and respecting more expert and public opinion in order to harmonize the policy with the needs of modern society.

**Keywords:** Daylight Saving Time, public opposition, energy conservation, health impacts, U.S. political debate, public sentiment, policymaker perspectives

## 1 Introduction

Daylight Saving Time (“DST”) is a policy of adjusting time to achieve extended daylight in the summer evenings by setting clocks one hour before standard time, according to the Oxford Dictionary[3]. However, despite the fact that the United States (“U.S.”) government has been adhering to the DST policy, there is a sizable percentage of the population that does not support it, and their attitudes are a growing cause for concern. In the book *Spring Forward: The Annual Madness of Daylight Saving Time*, Tufts University professor Michael Downing mentions that each year in the U.S., 14 state legislatures debate bills aimed to change how time is recorded[4]. This paper explores why U.S. policymakers insist on DST and why the public is opposed to it.

## 2 Background and Evolution of Daylight Saving Time in the U.S.

Daylight Saving Time (“DST”) policy appeared in the early 20th century and has gradually spread across Europe and North America (Downing, 2015)[4]. The choice of DST

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methods and duration varies from country to country. Early DST policies focused on energy conservation and improving agricultural efficiency (Küfeoğlu et al., 2021)[8], but the impact and significance of DST has become more complex over time.

The background of DST policy is well explained in an article published in the *Journal of Social Science* by Professor Torres R. Gray of the University of Texas at Dallas and Professor Jeffrey A. Jenkins of the University of Southern California. In the early 1900s, several cities and states in the U.S. began to experiment with DST policies. However, due to the lack of uniform standards and regulations, the clocks in different locations needed to be adjusted consistently, which created problems in areas such as commerce and transportation. To further support the World War I effort, in March 1918, the U.S. implemented a national DST system and passed the International Daylight Saving Act (Gray & Jenkins 2019)[6]. However, after the end of the war, farmers' lobbying organizations pushed for repealing DST provisions of the Daylight Saving Time Act.

Despite the opposition of President Woodrow Wilson, most legislators eventually supported the repeal. The local practice of DST resumed in 1942, in response to energy demands and concerns about oil supplies during World War II. But at the time, "Daylight Saving Time was a mixed bag; cities, counties, and states could follow it on whatever schedule they liked, or not follow it at all" (Gray & Jenkins 2019)[6]. It was not until 1966 that the U.S. Congress passed the Uniform Time Act. This act established the start and end dates of DST as well as time adjustments, which created the uniformity of time and opened the debate about the shift in DST time that continues to this day.

### **3 U.S. Public Attitudes Toward Daylight Saving Time Policies**

A Monmouth University polling study was conducted in March 2022 with a probability-based national random sample of 809 adults aged 18 and older. The results show that six in ten Americans (61%) want to eliminate the twice-a-year time change in the U.S., while a little more than one-third (35%) want to keep it the way it currently is (Monmouth University Polling Institute, 2022)[5].

The public's opposition is largely attributed to: 1) concerns about physical and mental health effects, and 2) disruption to family and social life.

#### **Physical and Mental Health Effects**

- Adam P. Spira, a professor of mental health at Johns Hopkins University, argues that moving the clocks forward in the spring causes people's internal clocks to go to sleep and wake up before they're ready. And this misalignment can continue during DST, reducing the amount of sleep people are able to get, which can harm their health (declining cardiovascular health, diabetes, obesity, etc.). Also, people's body experiences a reduction in sunlight exposure during the latter months of the year when we drop back. When this occurs, the body is unable to produce an adequate amount of serotonin, a chemical that enhances mood. Subsequently, we may experience a

decrease in energy levels and become more susceptible to mood fluctuations, which may increase our risk of developing depression. According to the American Association of Retired Persons (AARP), depression rates increased by 11% when individuals adjusted their timepieces in the autumn[2].

- Many U.S. health professional organizations have also expressed concerns and worries about the effects of DST on physical and mental health. For example, the American Academy of Sleep Medicine (AASM) noted in a 2022 statement that DST adjustments may lead to sleep deprivation, which in turn may have a negative impact on physical health and cognitive function. The consequences would potentially be detrimental to people's social life and their interaction with family (AASM, 2022)[1].
- According to sleep expert Adam Spira, PhD, MA, a professor in Mental Health, scientific evidence indicates that altering the clocks leads to significant increases in adverse health outcomes, including heart attacks and strokes. This transition is also linked to an increased likelihood of mood disorders and hospitalisations, along with heightened levels of inflammatory markers due to stress. Furthermore, the risk of vehicular accidents surges immediately following the spring forward; a 2020 study revealed that this change elevates the risk of fatal traffic incidents by 6%.
- Increased after-work sunlight does not inherently equate to improved health. Sunlight is the most potent regulator of our circadian rhythms—the endogenous clocks that govern our bodily functions. Spira states that while extended evening daylight facilitates outdoor activities, "increased light exposure near bedtime complicates the ability to fall asleep at our customary hour and may diminish the total sleep duration each night." We also see a reduction in morning light, resulting in many individuals awakening in darkness. Spira states that this is detrimental, as early light exposure has a stimulating effect and aids in sustaining a robust circadian rhythm[2].

### **Disruption to Family and Social Life**

- In a data survey in the *Journal of Health and Physical Education*, Kathleen D. Zick, a professor in the Department of Family and Consumer Studies at the University of Utah, studied the population's feedback on DST's encouragement of physical activity[10]. The result of her study further complements the effects suggested by the previous two sets of evidence. Data from the 2003-2009 American Time Use Survey (studying 18-64 year old residents of four Southwestern states), was assessed to determine if DST is associated with increased time spent in moderate to vigorous physical activity. The conclusions suggest that although DST may influence people's choices about when and where to engage in physical activity, it does not tap the potential of DST as an incentive for greater physical activity participation.
- The economic onset of Daylight Saving Time (DST) in spring appears to lead to extensive sleep deprivation and circadian rhythm disturbances, potentially correlating with diminished productivity and heightened absenteeism or presenteeism. Nonetheless, employees with varying chronotypes are not uniformly affected.

"Night owl" workers experience more significant repercussions from the commencement of DST compared to "Morning Larks." In any case, reduced work productivity results in economic losses, estimated at \$434 million annually

- The stock market, conversely, may derive advantages from prolonged Daylight Saving Time. Certain analysts conclude that the S&P 500 achieves an average increase of 7.5% across multiple years during Daylight Saving Time, in contrast to 2% during regular time. Researchers suggest that Daylight Saving Time enhances investor sentiment, potentially due to heightened risk-taking behaviour leading to enhanced stock market returns. Nonetheless, some experts disagree, referencing studies that separate DST from stock market volatility. Moreover, alterations to Daylight Saving Time may negatively affect the synchronisation of international trade and commerce[11].

#### 4 Policymaker's Perspective and Decision Implications

In addition to the voice of the masses in the debate, U.S. policymakers, on the other hand, adhere to the DST policy for multiple reasons. This includes the belief that DST policy contributes to energy conservation, both electricity and oil consumption. Furthermore, the government coordinates with other countries and regions, especially neighboring countries, and that policymakers weigh the costs of administering and implementing the policies.

In 2019, The U.S. Energy Information Administration (EIA) released a report showing that during DST, the U.S. saw a 0.9% drop in electricity consumption during the summer compared to standard time (EIA, 2019)[7]. In addition, a report by the U.S. Minerals Management Service (MMS), showed DST saves about 670,000 barrels of oil in fuel consumption annually, which can reduce automobile fuel consumption by about 1% (Küfeoğlu et al., 2021)[8].

Politicians motivated to combat crime highlight the advantages of Daylight Saving Time in enhancing public safety. Daylight Saving Time is associated with a reduction in criminal activity, evidenced by a 48% decline in homicides, a 56% reduction in sexual assaults, and a 7% fall in robbery incidents, resulting in an annual savings of \$59 million from prevented robberies alone. A total of \$558 million in mitigated social costs associated with all crimes is reported. The conclusion of Daylight Saving Time appears to enhance morning voter participation, eliminating the have to awaken as early as customary. This is especially beneficial for voters who cast their ballots prior to commencing school runs and their usual workweek[11].

Permanent Daylight Saving Time is advantageous for demographics and locales that thrive on recreation and tourism, exemplified by Florida, which has advocated for its implementation. At least 29 states are contemplating legislative actions for permanent Daylight Saving Time; however, previous national attempts for permanent DST have been politically unpopular and ineffective due to ongoing worries regarding kid safety during early commutes in darkness[11].

In terms of political factors, the following two aspects are important: 1) the government may consider voters' attitudes towards DST in order to maintain political support,

and 2) different political parties may have different views on the DST policy. For example, the Sunshine Protection Act, which was passed by the U.S. Senate in March 2022 and introduced by Marco Rubio, a Florida Republican, would have permanently established DST for the nation. The legislation was welcomed by some House members after it passed the Senate. Speaker of the House, Nancy Pelosi, a California Democrat, said in an interview with *The Hill*, a top U.S. political website, that she supports making DST permanent. However, others such as Rep. Frank Pallone (Democrat), chairman of the House Energy and Commerce Committee, told *The Hill* in July, “I can’t say it’s a priority” (Schnell, 2022)[9]. House Republican Leader Mike Moyle of Idaho wrote and introduced legislation in 2014 proposing a switch to permanent standard time. Again, in 2015, he wrote and filed legislation to consider permanent DST (Downing, 2015)[4].

The interviews above demonstrate the legislative process of DST in the U.S. and the demands and actions of different political parties and groups. The impact of “partisan, chamber of commerce, regional, and temporal variations” on policymaking over the course of the policymaking history of DST in the U.S. includes “whether ideological, geographic, and compositional outcomes are consistent within political parties and across chambers” (Gray & Jenkins 2019)[6].

## 5 Conclusion

By analyzing the history, effects, and public attitudes toward the DST policy in the U.S., this paper aims to understand the government’s reasons for adhering to this policy. Despite public opposition, the government has not changed its position. The benefits of extended daylight, such as potential reductions in crime rates and increases in economic activity, have been emphasized by proponents of DST. However, these benefits must be weighed against the significant public health concerns and the disruptions to daily life that many Americans experience during the clock changes.

In light of the growing opposition, it may be time for the government to reevaluate the DST policy and conduct extensive consultations with experts and the public. Policymakers could explore alternatives, such as adopting a permanent standard time or a more flexible approach that allows states to opt-in or opt-out of DST based on local preferences and conditions.

Public education campaigns could further help raise awareness about the implications of DST, allowing citizens to engage more meaningfully in the conversation. By encouraging a participatory approach, the government can develop a policy that addresses the diverse needs and opinions of its constituents.

Ultimately, through in-depth studies and public participation, a more reasonable and modernized DST policy that aligns with societal needs can be crafted. As society evolves and the understanding of health impacts and lifestyle preferences shifts, so too should the policies governing our timekeeping practices. Embracing change in this regard could enhance the overall well-being of Americans, balancing the historical traditions of timekeeping with the modern demands of health, safety, and productivity.

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