SB0268 Full-Year Daylight Savings Time FAV.pdf Uploaded by: Cecilia Plante

Position: FAV



TESTIMONY FOR SB0268 General Provisions - Full-Year Daylight Savings Time

Bill Sponsor: Senator Ready

Committee: Education, Energy, and the Environment **Organization Submitting:** Maryland Legislative Coalition

Person Submitting: Cecilia Plante, co-chair

Position: FAVORABLE

I am submitting this testimony in favor of SB0268 on behalf of the Maryland Legislative Coalition. The Maryland Legislative Coalition is an association of activists - individuals and grassroots groups in every district in the state. We are unpaid citizen lobbyists and our Coalition supports well over 30,000 members.

Our members were excited to see that the General Assembly would finally look at the cost of changing the clock every spring and fall. It increases the number of heart attacks and traffic accidents as people adjust to a temporary sleep deficit. It is dangerous and unnecessary and universally hated by school children, parents and working people.

We support this bill and recommend a **FAVORABLE** report in committee.

230306-SB268-Daylight-sav-time.pdfUploaded by: Christine Hunt

Position: FAV

Christine Hunt and Jay Crouthers 1014 Dockser Drive Crownsville, MD 21032

March 6, 2023

Maryland General Assembly Members of the Education, Energy and the Environment Annapolis, MD

RE: SB0268 – General Provisions – Full-Year Daylight Savings Time

Dear Senators,

We support SB 268 and respectfully request that you vote for it.

We wholeheartedly support making standard time to be Eastern Daylight time year-round!

Sincerely,

Christine Hunt and Jay Crouthers

SB268 DST Testimony.pdf Uploaded by: Justin Ready Position: FAV

JUSTIN READY Legislative District 5 Carroll County

Finance Committee



James Senate Office Building 11 Bladen Street, Room 315 Annapolis, Maryland 21401 410-841-3683 · 301-858-3683 800-492-7122 Ext. 3683 Justin.Ready@senate.state.md.us

THE SENATE OF MARYLAND ANNAPOLIS, MARYLAND 21401

SB 268 – General Provisions – Full Year Daylight Savings Time

March 7, 2023

Chair Feldman, Vice Chair Kagan, and members of the Senate Education, Energy, and the Environment Committee,

SB 268 would signal Maryland's desire to remain on Daylight Saving Time year-round. To date, <u>42 states</u> are entertaining or have passed legislation on the issue while two—Arizona and Hawaii—only observe their respective standard times.

Daylight Saving Time was initially implemented during World War I to save energy, but maintained unexpected popularity among Americans after the war, and was re-introduced year round during World War II for the same energy saving reasons. However, with the technological advances we have realized today there is no significant energy saving associated with the time change process. What has not changed, on the other hand, is the continued popularity of Daylight Time among Americans and their desire to make it permanent.

The Federal Uniform Time Act of 1966—which codified Daylight Saving Time at the federal level—has been amended twice; both times extended the Daylight Saving period. The most recent change was a 2005 amendment which took effect in 2007. These changes to the original Act demonstrate the flexibility of time adjustment and offer precedent when considering changes at the state level. The Federal Uniform Time Act currently allows states to adopt the Standard Time of their current time zone, but not Daylight Time. The purpose of passing this bill would be to add our name to the list of states asking the federal government to amend the Act and allow us to adopt Daylight Time permanently.

Given both the sustained popularity of Daylight Saving Time since the first World War to the amending of the Uniform Time Act to today's nation-wide effort it is time Maryland joined the fight.

The problems often associated with Daylight Saving Time, most notably sleep deprivation and the lingering effects of it, are mostly due to the switch from Standard Time to Daylight Saving

¹ Steve P. Calandrillo and Dustin E Buehler, "Time Well Spent: An Economic Analysis of Daylight Saving Time Legislation," Wake Forest Law Review, 2008)

Time rather than the impact of a later sunset as the body eventually readjusts². Staying on one time will alleviate these negative effects.

The reasons to choose Daylight Time over Standard Time include economic benefit, traffic safety, and crime reduction. Several studies show that many crime incidents are low during morning hours and peak during late afternoon and evening hours.³ By adopting Daylight Saving Time permanently, workers will be able to be home before darkness falls. More daylight gives people the liberty of being outside after work, enjoying the daylight rather than going straight home. Anecdotally, we can think of walking down Main Street here in Annapolis at 5 during Daylight Saving Time with light for an extra hour versus during Standard Time when darkness coincides with getting off work. A State of Massachusetts study even found year-round Daylight Saving Time would lead to fewer traffic fatalities due to increased visibility during prime driving hours.⁴

Springing forward and staying there would benefit the State of Maryland, our economy, our roads, and put us in line with the rest of our country in recognizing this outdated policy.

I respectfully request a favorable report for SB 268.

² Jennifer L. Doleac and Nicholas J. Sanders, "Under the Cover of Darkness: How Ambient Light Influences Criminal Activity," *Review of Economics and Statistics* 97, no. 5 (2015): pp. 1093-1103, https://doi.org/10.1162/rest a 00547)

³ Buehler/Calandrillo; Doleac/Sanders

⁴ "Report of the Special Commission on the Commonwealths Time Zone," Report of the Special Commission on the Commonwealths Time Zone § (n.d.))

pDST_testimony.pdf Uploaded by: Matthew Riebel Position: FAV

I testify in favor of SB0268 to stop the time change and keep Maryland on daylight saving time year round pending Congressional approval. Numerous studies in the past have shown that the time change causes serious health issues in many Americans.

First, the spring forward time change causes heart attacks every year. There is a 25% increase in heart attacks on the Monday following the onset of DST in March, according to a 2015 University of Michigan study.

https://patch.com/michigan/royaloak/study-check-pulse-spring-forward-daylight-saving-time

According to a 2016 study from Austin Smith, a 5.6% rise in traffic accidents in the week following the spring forward results in 30 deaths and \$275M in social costs per year. Americans sleep, on average, 40 minutes less on the Sunday of the DST change than on other Sundays. No sizable effects during the fall change have been detected.

https://pubs.aeaweb.org/doi/pdfplus/10.1257/app.20140100

Moreover, a 2019 study published in the Journal of Clinical Medicine showed that acute myocardial infarction (AMI) increases 5% in the week following the spring time change.

https://www.mdpi.com/2077-0383/8/3/404/htm

Finally, to those advocating for later school start times that think we must go to permanent standard time (pST) instead of permanent DST (pDST), I do not really think it would matter how we set the clock. Maybe if we went to pST, adults would want to start work at 8am and prefer high schools start are 7:30am, while Start School Later would be pushing for a start time of 9am. While on pDST, adults would want to start work at 9am and prefer high schools start at 8:30am, while Start School Later would push for a start time of 10am. In other words, it would be a mere "relabeling" of the hours on the clock and would not affect the difference between what is best for high schoolers to maximize time to socialize with their families versus to keep their bodies healthy.

FINAL - SB268 Daylight Savings Time.pdf Uploaded by: Grace Wilson

Position: UNF

SB268 – GENERAL PROVISIONS – FULL-YEAR DAYLIGHT SAVINGS TIME

March 7, 2023
EDUCATION, ENERGY, AND THE ENVIRONMENT

OPPOSE

Grace Wilson, Legislative & Policy Specialist (410.440.1758)

Anne Arundel County Public Schools (AACPS) opposes **SB268**. This bill requires the standard time in Maryland to be Eastern Daylight Time year-round. This change is contingent on the appropriate federal law being amended to allow states to observe a year-round standard time that is consistent with Eastern Daylight Time. The Secretary of State is required to monitor changes to federal law and notify the Department of Legislative Services when the contingencies are met. If DLS receives the notice on or before December 31, 2028, this change will take effect the second Sunday in March or the first Sunday in November after the change takes effect, whichever occurs first. If DLS does not receive notice of the contingencies being met by December 31, 2028, the bill terminates.

The Board of Education of Anne Arundel County supports school start times that are consistent with student health, safety, and student developmental needs. Many school systems are working to address this issue, which has gained attention after decades of scientific research. Accordingly, at the beginning of the 2022-2023 school year, AACPS moved to align school start times with recommendation by national health and educational organizations for student well-being and academic success. Those organizations include the American Academy of Pediatrics, American Academy of Sleep Medicine, American Medical Association of School Nurses, Society of Pediatric Nurses, National Education Association, and National Parent Teacher Association.

Existing school start time recommendations are based on current practices of alternating between standard time and Eastern Daylight Time. If Maryland were to permanently shift to Eastern Daylight Time, the sun would not rise until approximately 8:30 am during the shortest days of winter. As a result, AACPS students would be walking to school or the bus stop in the dark for many more winter mornings during the school year. Student safety is of the utmost importance to AACPS and requiring students to walk to school and bus stops in the dark creates a genuine safety concern. If this bill were to become law, AACPS would be required to adjust school times yet again in order to meet recommended health guidelines. Such significant adjustments would greatly disrupt the lives of students and families throughout the State with respect to both in-school and out-of-school obligations and activities, forcing many school systems to impose school hours that could be detrimental to student health, well-being, and academics.

Accordingly, AACPS respectfully requests an UNFAVORABLE committee report on SB268.

UNF SB-268 - Sleep Medicine Physician Response to Uploaded by: Indira Gurubhagavatula

Position: UNF

RE: UNFAVORABLE - SB 268 - Permanent Daylight Saving Time in Maryland

Dear Senators Ready, Feldman, and members of the Maryland Senate Education, Energy, & Environment Committee:

As sleep medicine professionals and scientists, we urge you to vote against SB 268 and adopt permanent standard time instead.

Permanent DST (pDST) would delay Maryland sunrise to 8:39am, and past 8am up to 102 days (3.4 months) each year.

The United States tried pDST during the 1973 OPEC oil embargo, but saw only minimal benefits on energy savings. Despite offering more light in the evenings, pDST resulted in many more days with dark mornings, particularly in the winter; hence pDST became extremely unpopular, even more so in rural areas, and was **reversed after just one single winter by a strong congressional majority**.

Morning light is crucial for proper circadian alignment, and is one of the treatments used for seasonal depression. If we adopt pDST, we would have many, more dark mornings, with more light in the evening hours.

This has two serious effects:

- 1) Effects on the <u>biological clock</u>: Early morning darkness and evening light have similar effects on the biological clock, causing internal body rhythms to shift to later in the day. This can cause individuals to become unable to fall asleep until later in the evening or get up until later in the morning, a condition called "<u>chronic phase</u> delay."
 - a. This chronic discrepancy between the internal biological clock and the social clock, which we use for getting up to go to work and school, is called "<u>social jet lag</u>." Social jet lag has been shown in research studies to increase the risk of obesity, metabolic syndrome, cardiovascular disease, and depression.
 - b. Those who are most vulnerable would be adolescents, who are already expected to arise very early to catch the first tier of buses to get to school, and who are already chronically sleep deprived, based on polls conducted by the National Sleep Foundation. Other groups at special risk would include workers who have long morning commutes, and/or have to start morning work before 8:30 AM.
- 2) <u>Insufficient sleep</u>: Having to get up early in the morning despite being unable to fall asleep until late at night also results in chronic sleep loss, which is associated with a host of health problems, including fall-asleep crashes.

The Maryland Association of Boards of Education, Agudath Israel of Maryland, Bloomberg Editorial Board, American Medical Association, American Academy of Neurology, American College of Chest Physicians, National Safety Council, American Academy of Sleep Medicine, National Sleep Foundation, National PTA, Society for Research on Biological Rhythms, Society of Behavioral Sleep Medicine, and many more have opposed permanent DST and urged instead for permanent Standard Time. For more information, please consult this site: https://savestandardtime.com/endorsements/

Thank you for considering our request.

Sincerely yours,

Indira Gurubhagavatula, MD, MPH, who considers Baltimore her hometown

Associate Professor, Division of Sleep Medicine, University of Pennsylvania Long-term resident of Catonsville, MD Graduate of Johns Hopkins University School of Medicine

Susheel P. Patil, MD, PhD (former chair of the Maryland Sleep Society)

Clinical Associate Professor, Case Western Reserve University University Hospitals System Director of Sleep Medicine Former Clinical Director, Johns Hopkins Sleep Medicine Long-term resident of Ellicott City, MD

Reena Mehra, MD, MSCE

Professor of Medicine, University Hospitals System Director of Sleep Medicine Director, Sleep Disorders Research, Neurologic Institute

Staff, Respiratory Institute, Heart and Vascular Institute, Molecular Cardiology Department of the Lerner Research Institute

Cleveland Clinic Lerner College of Medicine of Case Western Reserve University

James Crabtree Unfavorable Testimony on Maryland S Uploaded by: James Crabtree

Position: UNF

Dear Members of the Education, Energy, and the Environment Committee,

Thank you for allowing me the opportunity to testify against Senate Bill 268. I am James Crabtree, a Maryland resident and a volunteer for Save Standard Time, a nonprofit organization that works to preserve and extend the observation of longitudinally correct Standard Time.

On the darkest days of the year, the temptation of more time to spend in the sun can be challenging to resist. In 1973, as the United States faced an energy crisis, federal lawmakers were enticed by the promise of brighter evenings and passed the same policy of permanent Daylight Saving Time that Maryland is now considering. Then, the first Monday of 1974 came, and the sun rose at 8:25 a.m. in Annapolis. Jet blackness, as one mother described the scene at her daughter's bus stop, engulfed the nation until long after morning commuters had departed for work or school. While Standard Time was not due to return until October 1975, the failed experiment was ended one year early to spare citizens a second consecutive winter of morning misery.

Not only does permanent Daylight Saving Time have a history of extreme unpopularity, but scientists warn that exposure to excess evening sunlight and insufficient morning sunlight chronically worsens health, public safety, and the economy. Similarly, experts advise that humans operate ideally when the center of daylight hours roughly corresponds with civil noon, a phenomenon that occurs only when clocks are set to Standard Time. Introducing one hour of misalignment between solar time and circadian time perpetually deprives sleep, which explains all of the negative trends that are associated with Daylight Saving Time.⁴

While all residents of Maryland would suffer from the ramifications of extending Daylight Saving Time through the winter, I often hear this issue discussed in the specific context of school start times. The academic day at most middle schools and high schools in Maryland already begins before the earliest time of 8:30 a.m. recommended by tens of organizations dedicated to pediatric health, forcing students to battle their own biology to arrive at their morning classes on time. ^{5,6} Daylight Saving Time shifts school start times one additional hour earlier relative to the time of sunrise, negating all efforts to give students a healthy amount of morning sunlight before school. As a current high school student, the prospect of first seeing the sun on January mornings halfway through my first class of the day instead of during my drive to school does not particularly appeal to me.

¹ Ripley, Anthony. "Senate Votes Return to Standard Time For Four Months and Sends Bill to Ford." *The New York Times*, 1 October 1974. Accessed 6 March 2023.

² Beaujon, Andrew. "The US Tried Permanent Daylight Saving Time in the '70s. People Hated It." *Washingtonian*, 15 March 2022. Accessed 6 March 2023.

³ Ripley, Anthony. "Senate Votes Return to Standard Time."

⁴ Giuntella, Osea, and Fabrizio Mazzonna. "Sunset time and the economic effects of social jetlag: evidence from US time zone borders." *ScienceDirect*, 18 January 2019. Accessed 6 March 2023.

⁵ Start School Later. "2022-2023 Public School Hours in Maryland." <u>Start School Later Maryland</u>, 10 August 2022. Accessed 6 March 2023

⁶ Start School Later. "Position Statements and Resolutions on Sleep and School Start Times." <u>Start School Later</u>, 29 January 2023. Accessed 6 March 2023.

No adjustment of time can make winter feel like summer, though extending Daylight Saving Time can make winters far more dismal. I ask anyone who is interested in keeping time honest and healthful to oppose Senate Bill 268, which seeks to redefine midnight as one hour before the middle of the night at the expense of quality of life and life itself.

Thank you,

James Crabtree jamescrab05@gmail.com

| Misconception Daylight Saving Time | Fact |
|------------------------------------|--|
| creates additional sunlight. | The amount of sunlight on any day depends solely on a location's distance from the equator and the time of the year. Daylight Saving Time replaces one hour of morning light with one hour of evening light. |
| improves physical health. | Daylight Saving Time elevates one's risks for obesity, diabetes, cardiovascular diseases, and breast cancer by increasing social jet lag. ⁷ |
| improves mental health. | Cases of seasonal affective disorder rise in November due to shorter overall daylight hours and the acute shock that accompanies gaining one hour. Early morning light, which Daylight Saving Time curtails, most effectively mitigates mood disorders. ⁸ |
| boosts the economy. | Chronic circadian misalignment caused by late sunrises and late sunsets costs billions of dollars per year in health-care expenses and lost productivity. ⁹ |
| reduces crime. | Crime rates peak from March through October, during the season of Daylight Saving Time. This trend is far less discernible in states that observe permanent Standard Time. ¹⁰ |
| saves energy. | Most modern studies find that the effect of Daylight Saving Time on overall energy consumption is not statistically significant, and some research correlates brighter evenings and darker mornings with a slight increase in demand for energy. ¹¹ |
| makes driving safer. | Not only do traffic accidents spike in the week following the transition to Daylight Saving Time, but later daylight hours render drivers more susceptible to drowsy driving, the largest identifiable and preventable cause of accidents. ^{12, 13} |

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⁷ Giuntella, Osea, and Fabrizio Mazzonna. "Sunset time and the economic effects of social jetlag."

⁸ Roenneberg, Till, et al. "Daylight Saving Time and Artificial Time Zones – A Battle Between Biological and Social Times." *Frontiers*, 9 July 2019. Accessed 6 March 2023.

⁹ Giuntella, Osea, and Fabrizio Mazzonna. "Sunset time and the economic effects of social jetlag."

¹⁰ Maciag, Mike. "Monthly Crime Data For Cities, Local Law Enforcement Agencies." *Governing*, 28 October 2014. Accessed 6 March 2023.

¹¹ Choi, Charles. "Does Daylight Saving Time Conserve Energy?" *Scientific American*, 1 March 2009. Accessed 6 March 2023.

¹² Fritz, Josef, et al. "A Chronobiological Evaluation of the Acute Effects of Daylight Saving Time on Traffic Accident Risk." *PubMed*, 24 February 2020. Accessed 6 March 2023.

¹³ Akerstedt. "Consensus statement: fatigue and accidents in transport operations." *PubMed*, December 2000. Accessed 6 March 2023.

is similar to flying to another time zone.

When traveling long distances east or west, the time between sunrise on one day and sunrise on the following day is significantly different from 24 hours. Clocks are adjusted to compensate for this discrepancy. Daylight Saving Time is the practice of living by a time zone that is east of one's physical location.



These photos were captured by James Crabtree on 10 December 2022 and 4 February 2023 in West River, Maryland. While Daylight Saving Time is not necessary to maintain reasonable sunset times, mornings from November through February would be extraordinarily dark without Standard Time.

A Year in Maryland on Permanent Daylight Saving Time

| Date | Oakland (western Maryland) | | Annapolis | | Ocean City (eastern Maryland) | |
|-------|-------------------------------|-----------|-----------|-----------|----------------------------------|-----------|
| | Sunrise | Sunset | Sunrise | Sunset | Sunrise | Sunset |
| 1 Jan | 8:38 a.m. | 6:05 p.m. | 8:25 a.m. | 5:55 p.m. | 8:18 a.m. | 5:51 p.m. |
| 1 Feb | 8:25 a.m. | 6:39 p.m. | 8:13 a.m. | 6:28 p.m. | 8:06 a.m. | 6:23 p.m. |
| 1 Mar | 7:51 a.m. | 7:10 p.m. | 7:39 a.m. | 6:59 p.m. | 7:33 a.m. | 6:54 p.m. |
| 1 Apr | 7:02 a.m. | 7:42 p.m. | 6:51 a.m. | 7:30 p.m. | 6:46 a.m. | 7:24 p.m. |
| 1 May | 6:19 a.m. | 8:12 p.m. | 6:08 a.m. | 7:59 p.m. | 6:04 a.m. | 7:52 p.m. |
| 1 Jun | 5:53 a.m. | 8:39 p.m. | 5:42 a.m. | 8:26 p.m. | 5:39 a.m. | 8:18 p.m. |
| 1 Jul | 5:54 a.m. | 8:48 p.m. | 5:44 a.m. | 8:35 p.m. | 5:40 a.m. | 8:28 p.m. |
| 1 Aug | 6:17 a.m. | 8:29 p.m. | 6:06 a.m. | 8:17 p.m. | 6:02 a.m. | 8:10 p.m. |
| 1 Sep | 6:46 a.m. | 7:48 p.m. | 6:34 a.m. | 7:36 p.m. | 6:29 a.m. | 7:30 p.m. |
| 1 Oct | 7:13 a.m. | 7:00 p.m. | 7:01 a.m. | 6:48 p.m. | 6:56 a.m. | 6:43 p.m. |
| 1 Nov | 7:46 a.m. | 6:16 p.m. | 7:33 a.m. | 6:05 p.m. | 7:26 a.m. | 6:00 p.m. |
| 1 Dec | 8:19 a.m. | 5:55 p.m. | 8:06 a.m. | 5:44 p.m. | 7:58 a.m. | 5:40 p.m. |

A Year in Maryland on Permanent Standard Time

| Date | Oakland (western Maryland) | | Annapolis | | Ocean City (eastern Maryland) | |
|-------|-------------------------------|-----------|-----------|-----------|----------------------------------|-----------|
| | Sunrise | Sunset | Sunrise | Sunset | Sunrise | Sunset |
| 1 Jan | 7:38 a.m. | 5:05 p.m. | 7:25 a.m. | 4:55 p.m. | 7:18 a.m. | 4:51 p.m. |
| 1 Feb | 7:25 a.m. | 5:39 p.m. | 7:13 a.m. | 5:28 p.m. | 7:06 a.m. | 5:23 p.m. |
| 1 Mar | 6:51 a.m. | 6:10 p.m. | 6:39 a.m. | 5:59 p.m. | 6:33 a.m. | 5:54 p.m. |
| 1 Apr | 6:02 a.m. | 6:42 p.m. | 5:51 a.m. | 6:30 p.m. | 5:46 a.m. | 6:24 p.m. |
| 1 May | 5:19 a.m. | 7:12 p.m. | 5:08 a.m. | 6:59 p.m. | 5:04 a.m. | 6:52 p.m. |
| 1 Jun | 4:53 a.m. | 7:39 p.m. | 4:42 a.m. | 7:26 p.m. | 4:39 a.m. | 7:18 p.m. |
| 1 Jul | 4:54 a.m. | 7:48 p.m. | 4:44 a.m. | 7:35 p.m. | 4:40 a.m. | 7:28 p.m. |
| 1 Aug | 5:17 a.m. | 7:29 p.m. | 5:06 a.m. | 7:17 p.m. | 5:02 a.m. | 7:10 p.m. |
| 1 Sep | 5:46 a.m. | 6:48 p.m. | 5:34 a.m. | 6:36 p.m. | 5:29 a.m. | 6:30 p.m. |
| 1 Oct | 6:13 a.m. | 6:00 p.m. | 6:01 a.m. | 5:48 p.m. | 5:56 a.m. | 5:43 p.m. |
| 1 Nov | 6:46 a.m. | 5:16 p.m. | 6:33 a.m. | 5:05 p.m. | 6:26 a.m. | 5:00 p.m. |
| 1 Dec | 7:19 a.m. | 4:55 p.m. | 7:06 a.m. | 4:44 p.m. | 6:58 a.m. | 4:40 p.m. |

A Year in Maryland on Current System of Clock Changes

| Date | Oakland (western Maryland) | | Annapolis | | Ocean City (eastern Maryland) | |
|--------|-------------------------------|-----------|-----------|-----------|----------------------------------|-----------|
| | Sunrise | Sunset | Sunrise | Sunset | Sunrise | Sunset |
| 1 Jan | 7:38 a.m. | 5:05 p.m. | 7:25 a.m. | 4:55 p.m. | 7:18 a.m. | 4:51 p.m. |
| 1 Feb | 7:25 a.m. | 5:39 p.m. | 7:13 a.m. | 5:28 p.m. | 7:06 a.m. | 5:23 p.m. |
| 1 Mar | 6:51 a.m. | 6:10 p.m. | 6:39 a.m. | 5:59 p.m. | 6:33 a.m. | 5:54 p.m. |
| 1 Apr | 7:02 a.m. | 7:42 p.m. | 6:51 a.m. | 7:30 p.m. | 6:46 a.m. | 7:24 p.m. |
| 1 May | 6:19 a.m. | 8:12 p.m. | 6:08 a.m. | 7:59 p.m. | 6:04 a.m. | 7:52 p.m. |
| 1 Jun | 5:53 a.m. | 8:39 p.m. | 5:42 a.m. | 8:26 p.m. | 5:39 a.m. | 8:18 p.m. |
| 1 Jul | 5:54 a.m. | 8:48 p.m. | 5:44 a.m. | 8:35 p.m. | 5:40 a.m. | 8:28 p.m. |
| 1 Aug | 6:17 a.m. | 8:29 p.m. | 6:06 a.m. | 8:17 p.m. | 6:02 a.m. | 8:10 p.m. |
| 1 Sep | 6:46 a.m. | 7:48 p.m. | 6:34 a.m. | 7:36 p.m. | 6:29 a.m. | 7:30 p.m. |
| 1 Oct | 7:13 a.m. | 7:00 p.m. | 7:01 a.m. | 6:48 p.m. | 6:56 a.m. | 6:43 p.m. |
| 1 Nov* | 7:46 a.m. | 6:16 p.m. | 7:33 a.m. | 6:05 p.m. | 7:26 a.m. | 6:00 p.m. |
| 1 Dec | 7:19 a.m. | 4:55 p.m. | 7:06 a.m. | 4:44 p.m. | 6:58 a.m. | 4:40 p.m. |

^{*} In years when 1 November is a Sunday, the times of sunrise and sunset for this date are one hour earlier than listed because of the relatively early switch from Daylight Saving Time to Standard Time.

Sources

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UNF on SB-268 - Save Standard Time.pdf Uploaded by: Jay Pea

Position: UNF

2023 March 6

Senate Committee on Education, Energy, and Environment Maryland General Assembly Annapolis, Maryland

Re: UNF on SB-268 - Permanent DST is a repeat/deadly failure. Amend to Standard.

Dear Honorable Senator,

Please oppose SB-268, permanent Daylight Saving Time (false time), which has repeatedly failed with loss of money and lives. Please urge amendment to the opposite policy, permanent Standard Time (natural time), for health, safety, education, economy, and civil liberties.

Scores of organizations—representing millions of researchers, physicians, teachers, parents, journalists, and community leaders—oppose permanent DST and endorse permanent Standard Time. Among these are Anne Arundel County Public Schools, Maryland Association of Boards of Education, Agudath Israel of Maryland, American Medical Association, American Academy of Neurology, American College of Chest Physicians, National Safety Council, American Academy of Sleep Medicine, National PTA, American College of Occupational & Environmental Medicine, Start School Later, Canadian Sleep Society, Association of Canadian Ergonomists, editorial boards of *Bloomberg*, *Star Tribune, Oregonian*, writers from Cato, *Daily Wire*, *Breaking Points*, and many more. [AASM] [AMA][CSS][SRBR]

Permanent DST would delay Baltimore sunrise past 8am (when most school/work begins)^{[CDC][Silver]} nearly 3 months (November 25 to February 13)—as late as 8:26am the first week of January. Places north and west would have sunrise delayed even later and longer. It increased deaths and sexual assaults of children when last attempted in the US.^{[Ripley][Sehlstedt]} It would force constituents to wake an hour early relative to solar time every weekday all winter. Support for permanent DST reverses into opposition when experienced. Maryland rejected permanent DST in 1974 upon learning its misery. It has failed several times throughout history.^{[BBC][Ripley][Yorkshire]} It is prohibited by the Uniform Time Act; it cannot end clock change quickly, as most voters wish. It would deprive morning light needed by farmers, construction workers, and other outdoor laborers.^[Schlanger] Its morning darkness would revert benefits of starting school later.^{[Cell][Skeldon]} It would delay radio broadcasts of morning news until most people have begun work.^[Stine] It would disrupt worship for those who pray daily at sunrise.^[Agudath] Moving clocks to DST acutely deprives sleep. Leaving clocks on DST chronically deprives sleep (average 19 minutes nightly).^{[Giuntella][Roenneberg]} DST's

delayed sunrise significantly increases accidents, disease (cancer up 12-36%), and healthcare costs. It significantly decreases learning, productivity, and earnings (wages down 3-5%). [Gibson][Giuntella][Gu][Roenneberg] It's not just clock change that harms, but also DST's forced early waking.

Permanent Standard Time is the clock set to the sun. It keeps sunrise before 8am (when most school/work begins). [CDC][Silver] It is pre-approved by the Uniform Time Act; it can end unpopular clock changes now. Professional polling shows most people consistently support permanent Standard Time. [AP] Permanent Standard Time has been observed in Arizona, Hawaii, all five US territories, and most nations for decades. Mexico restored permanent Standard Time just last year, and more states in our nation have permanent Standard Time bills than ever before. Permanent Standard Time protects start times for schoolchildren and blue-collar workers, by letting them sleep naturally past sunrise most days. [Borisenkov][Cell][Schlanger][Skeldon] Its benefits to circadian health improve immunity, longevity, mood, alertness, and performance in school, sports, and work. It can prevent traffic deaths, lower crime, and reduce chronic illnesses. [AASM][Juda][SRBR]

Please hear the consensus of history, science, and basic sense. Save time, money, and lives. Oppose permanent DST, urge amendment to permanent Standard Time.

Sincerely,

Jay Pea President

iav@savestandardtime.com

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No on SB-268, Permanent Daylight Saving Time

Permanent DST forces us to work/school in darkness. It increases accidents and depression. It's federally prohibited. It's repeatedly failed. It disrupts business. It costs children's lives. Permanent Standard Time instead is federally approved and most widely endorsed.

Amend to permanent Standard Time—for health, safety, education, and economy.

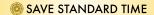
"Permanent Daylight Saving is a terrible idea for kids...

"The American Academy of Sleep Medicine is in favor of permanent Standard Time, as are many scientists who study sleep medicine."

Craig Canapari MD

Director, Pediatric Sleep Program, Yale School of Medicine

https://drcraigcanapari.com/why-permanent-daylight-saving-time-is-a-terrible-idea-for-kids/



"Year-round Standard Time would be best for public health and safety.

Permanent Daylight Savings Time may work against delaying school start times."

Mariana Szklo-Coxe PhD MHS
Associate Professor, Old Dominion University, Virginia

https://www.odu.edu/article/sleep-expert-argues-good-rest-a-public-health-issue

SAVE STANDARD TIME

"National PTA is opposed to Daylight Saving Time during the winter months because of the safety factor."

Heidi May Wilson

Spokesperson for the National Parent Teacher Association

https://www.washingtonpost.com/science/2019/03/08/springing-forward-daylight-saving-time-is-obsolete-confusing-unhealthy-critics-sayling-unhealthy-critics-sayling-unhealthy-crit



"Standard time is better aligned with the position of the sun and human nature.

It generally synchronizes people's waking with sunrise and bedtime with darkness, in accordance with circadian rhythms.

It also enables children and adults to go to school and work in daylight.

Daylight Saving Time effectively does the reverse."

Bloomberg Editorial Board

https://www.bloomberg.com/opinion/articles/2022-03-18/just-say-no-to-permanent-daylight-saving-time

SAVE STANDARD TIME







SAVE STANDARD TIME

The best clock for health, safety, education, economy, environment, civil liberties, and lasting public support.

| | Permanent Daylight Saving Time | Permanent Standard Time | |
|-------------------------------------|--|--|--|
| Morning Sunlight | Forces most people to start school or work before sunrise in winter. | Lets most people see sunlight in morning, when biology needs it most, year-round. | |
| Circadian Alignment | Misaligns clocks from circadian rhythms. | Aligns clocks to circadian rhythms. | |
| Sleep Health | Forces most people to wake by alarm before sunrise in autumn, winter, and spring. Dark mornings make waking harder. Light at night makes sleep harder. | Lets most people sleep naturally past sunrise all year-round. Bright mornings make waking easier Darkness at night makes sleep easier | |
| Mental & Physical Health | Increases depression, substance abuse, obesity, high blood pressure, stroke, heart disease, diabetes, and cancer. | Improves mood, neurology, stress resilience, weight, heart health, immunity, and longevity. | |
| Safety & Crime | Increases accidents and injury recovery times. | Improves alertness and decision-making. | |
| Education & Economy | Impairs school performance. Decreases workplace productivity and wages. | Improves school performance. Increases workplace productivity and wages. | |
| Farmers & Blue-Collar Workers | Shortens morning light needed for outdoor labor. | Preserves morning light needed for outdoor labor. | |
| Energy & Environment | Darker mornings increase demand for morning heat. Brighter evenings increase demand for evening A/C. | Balances the sun's light and heat between morning and evening, for less demand, less waste, and less waste. | |
| Radio Broadcasts | Dark mornings impair radio. News broadcasts would be delayed until most people have begun work. | Preserves morning light needed for radio broadcasts of morning news and traffic reports. | |
| Civil Liberties | Overlaps work hours with morning prayer times of observant Jews and Muslims. | Respects natural balance of morning and evening sunlight to permit morning prayer. | |
| Public Support | Historically support reverses into opposition when it's experienced. | Supported by current and historical polls. | |
| Law & History | Prohibited for states by the Uniform Time Act (15 USC §260a). Repeatedly tried and reverted in the US and other nations, with loss of money and loss of lives. | Pre-approved for states by the Uniform Time Act (15 USC §260a). Observed in Arizona, Hawaii, all five US territories, Mexico (starting in 2023), and most nations. | |

No on SB-287, Permanent Daylight Saving Time **Amend to Permanent Standard Time**

Permanent DST increased deaths and sexual assaults of children when last attempted in the US. Its delay of sunrise past 8am for several months forces early waking, deprives sleep, increases accidents, and disturbs human psychology.

Health and safety need morning sunlight, which only Standard Time can provide in winter.

Bids to kill daylight time heard

By ALBERT SEHLSTEDT, JR. Washington Bureau of The Sun

Washington-There were serious moves in Congress yesterday to repeal year-around daylight saving time, which went into effect only three weeks ago as an energy-saving measure.

Congressmen in both houses expressed concern over schoolchildren who have been endangered on roads and highways during the dark morning hours of winter.

In Florida, a special session of the state legislature was scheduled for today so that clocks could be turned back an hour. Eight schoolchildren have been killed in pre-dawn accidents there.

"The inescapable conclusion to be reached is that darkness had a great deal to do with the pre-dawn deaths," said Gov. Reubin Askew, who called the

See DAYLIGHT, A4, Col. 1

Children's deaths spur bid to repeal daylight saving

DAYLIGHT, from Al | Representative Claude Pepone-day session solely to deal per (D., Fla.), who, along with with the daylight saving time most of the Florida delegation,

Marlow W. Cook (R., Ky.) rose in energy that we will make do in support of repealing the not justify the loss of lives of year-round daylight saving our children nor the hardship plan, cleared by Congress De-placed upon our children and cember 14, and cited the Flor-their parents. ida deaths, plus a reported increase in sexual assaults on loss of benefit from energy youngsters in Minnesota and that would be saved in the problems in other states.

Senator Dick Clark (D., Iowa), sponsor of one of the lives of our children should bills to repeal the daylight receive first consideration." measure, said it was the No. 1 issue he confronted when trav- with daylight time appear to eling in his home state during have been exaggerated, acthe Christmas recess.

nize we may well have made a subject yesterday that the Fedmistake," Senator Clark told eral Power Commission has his colleagues.

8 bills in House

Kan.), also sponsoring a re- of from 1 to 3 per cent had pealer, said the daylight bill been hoped for. passed in December had little in-depth study.

said he was appalled by the the problem that the new law Florida deaths and urged the created is already behind the Senate Commerce Committee nation. immediate consideration.

Capitol, there are eight bills morning before the repealers before the Commerce Commit- are approved by the appropritee calling for the repeal of ate congressional committees All have been introduced since given adequate advance warncongressmen returned from ing to change their schedules, their home districts to Wash- and the legislation is finally ington January 21.

is supporting repeal, said last In the United States Senate, week that "the small savings

"I regret for others their country and from extra time at the end of the day, but the

Forecasts of energy savings cording to Senator Clark. He "I think it's time we recog- said in a floor speech on the estimated that only two-tenths of 1 per cent of this month's fuel savings could be attrib-Senator Robert Dole (R., uted to daylight time. Savings

If Congress does, indeed, conclude that it made a mis-The majority leader, Senator take in enacting daylight time Mike Mansfield (D., Mont.), for the winter months, much of

to give repeal legislation its. The sun is rising earlier each day and light could be On the House side of the over most of the country in the winter daylight saving time, and transportation agencies are enacted into law.

The Baltimore Sun (1974 January 29) https://www.newspapers.com/image/377091547



Permanent Standard Time Is Federally Approved Permanent Daylight Saving Time Is Federally Prohibited

Any state can exempt itself from Daylight Saving Time.

Arizona, Hawaii, and all five US territories did it decades ago.

More states than ever are now considering permanent Standard Time.

As with all state legislation, effective date of DST exemption can be contingent on neighboring states passing equivalent legislation, if desired.

Permanent DST when tried has increased deaths and disrupted business.

Permanent Standard Time is the quickest, safest way to end clock change.

15 U.S. Code Subchapter IX - STANDARD TIME

§ 260a. Advancement of time or changeover dates

(a) Duration of period; State exemption

During the period commencing at 2 o'clock antemeridian on the second Sunday of March of each year and ending at 2 o'clock antemeridian on the first Sunday of November of each year, the standard time of each zone established by sections 261 to 264 of this title, as modified by section 265 of this title, shall be advanced one hour and such time as so advanced shall for the purposes of such sections 261 to 264, as so modified, be the standard time of such zone during such period; however, (1) any State that lies entirely within one time zone may by law exempt itself from the provisions of this subsection providing for the advancement of time, but only if that law provides that the entire State (including all political subdivisions thereof) shall observe the standard time otherwise applicable during that period, and (2) any State with parts thereof in more than one time zone may by law exempt either the entire State as provided in (1) or may exempt the entire area of the State lying within any time zone.

https://www.law.cornell.edu/uscode/text/15/260a



Endorsements of Permanent Standard Time as the Better Year-Round Clock

The following parties reject permanent Daylight Saving Time and endorse permanent Standard Time as the better year-round clock. These are not implied to be endorsements of the Save Standard Time entity. This list is non-comprehensive.

Health

American Academy of Cardiovascular Sleep

American Academy of Neurology American College of Chest Physicians

California Sleep Society

Canadian Society for Chronobiology

Dakota Sleep Society

Indiana State Medical Association

Maryland Sleep Society

Michigan Academy of Sleep Medicine

National Sleep Foundation

San Diego Academy of Child/Adolescent Psychiatry

Sleep Research Society

Society for Research on Biological Rhythms

Society of Behavioral Sleep Medicine

Tennessee Sleep Society World Sleep Society American Academy of Dental Sleep Medicine

American Academy of Sleep Medicine

American Medical Association Canadian Sleep Society

Capitol Neurology Hampden District Medical Society

Kentucky Sleep Society

Massachusetts Medical Society

Missouri Sleep Society

Northwest Noggin Neuroscience San Diego Psychiatric Society

Society for Light Treatment & Biological Rhythms

Society of Anesthesia & Sleep Medicine

Southern Sleep Society Wisconsin Sleep Society

Education & Families

Anne Arundel County Public Schools

Florida PTA

Maryland Association of Boards of Education Regional Adolescent Sleep Needs Coalition Colorado PTA

League of Women Voters of Delaware County

National PTA Start School Later

Safety & Labor

American College of Occupation & Environment

B-Society

Good Light Group

Solaris Fatigue Management

Association of Canadian Ergonomists

Daylight Academy National Safety Council

News Editorial Boards

Bloomberg Opinion Minneapolis Star Tribune

South Florida Sun Sentinel

The Daytona Beach News-Journal

The Oregonian

Religious Rights

Adath Israel San Francisco Agudath Israel of California Agudath Israel of Florida California Islamic University Rabbinical Council of California Agudath Israel of America Agudath Israel of Chicago Agudath Israel of Maryland Rabbinical Council of America

Individuals

Raúl Aguilar-Roblero MD PhD, Mexico Konstantin V Danilenko MD PhD, Novosibirsk, Russia Elizabeth B Klerman MD PhD, Boston, Massachusetts Michael T Lam MD PhD, San Diego, California Michael McCarthy MD PhD, San Diego, California Thomas E Nordahl MD PhD, Davis, California David K Welsh MD PhD, San Diego, California Amir Zarrinpar MD PhD, San Diego, California Salman Ahsan PhD, San Jose, California Shimon Amir PhD, Montreal, Quebec Sonia Ancoli Israel PhD, San Diego, California Michael Antle PhD, Calgary, Alberta William Bechtel PhD, San Diego, California Mikhail Borisenkov PhD, Moscow, Russia Joseph Boyd PhD, Temecula, California Hugo Calligaro PhD, San Diego, California Oscar Castanon-Cervantes PhD, Atlanta, Georgia Archana G Chavan PhD, Merced, California Joanna C Chiu PhD, Davis, California Scott Cookson PhD, San Diego, California Joseph De Konick PhD, Ottawa, Ontario Jason DeBruyne PhD, Atlanta, Georgia Grant Denn PhD, Colorado Jaime K Devine PhD, Baltimore, Maryland Heinz Freisling MSc PhD, Lyon, France Frederic Gachon PhD, St Lucia, Queensland, Australia Karen L Gamble PhD, Birmingham, Alabama Susan S Golden PhD, San Diego, California Marijke CM Gordijn MS PhD, Netherlands Bill Griesar PhD, Portland, Oregon Chelsea Gustafson PhD, Portland, Oregon Liz Harrison PhD, San Diego, California Dietrich Henckel PhD, Germany Erik Herzog PhD, St Louis, Missouri Myriam Juda PhD, Vancouver, British Columbia Thomas Kantermann PhD, Essen, Germany Paul Kelley PhD, Milton Keynes, United Kingdom Achim Kramer PhD, Germany Camilla Kring PhD, Copenhagen, Denmark Katja Lamia PhD, San Diego, California Andy LiWang PhD, Merced, California Travis Longcore PhD, Los Angeles, California Emily Manoogian PhD, San Diego, California Peter Mansbach PhD, Bethesda, Maryland Erik Maronde PhD, Frankfurt, Germany Girish Melkani MS PhD, San Diego, California Martha Merrow PhD, Germany Matt Metzgar PhD, Charlotte, North Carolina Ralph Mistlberger PhD, Vancouver, British Columbia João Nunes PhD, Dresden, Germany Marie Pariollaud PhD, La Jolla, California

Ketema Paul PhD, Los Angeles, California Linda Petzold PhD, Santa Barbara, California Frank Powell PhD, San Diego, California Kendall Satterfield PhD, San Diego, California Dorothy D Sears PhD, San Diego, California Lori L Shemek PhD, Dallas-Fort Worth, Texas Benjamin Smarr PhD, San Diego, California Andrea Smit PhD, Vancouver, British Columbia Barbara Sorg PhD, Portland, Oregon Heather R Spence PhD, Arlington, Virginia Melissa A St Hilaire PhD, Boston, Massachusetts Andrew Steele PhD, San Luis Obispo, California Joseph S Takahashi PhD, Dallas, Texas Jennifer Thomas PhD, San Diego, California Gianluca Tosini PhD, Atlanta, Georgia Roger Tseng PhD, Ames, Iowa Judy Village PhD CCCPE, British Columbia John Wesley White PhD, Sarasota, Florida Daniel S Whittaker PhD, Los Angeles, California Anna Wirz-Justice PhD, Switzerland Wen Zhang PhD, Indianapolis, Indiana Ying Zhang PhD, Indianapolis, Indiana Irving Zucker PhD, Berkeley, California Susanna Barry PsyD, Medford, Massachusetts Mariah Baughn MD, San Diego, California Steven M Croft MD FAAN, Houston, Texas Richard E Cytowic MD, Washington, DC Mona Ezzat MD, San Diego, California John F Gottlieb MD, Chicago, Illinois Royan Kamyar MD, La Mesa, California Alison Kole MD MPH FCCP FAASM, New Jersey Jack Kruse DMD MD, New Orleans, Louisiana Beth Malow MD MS, Brentwood, Tennessee Melody T McCloud MD, Atlanta, Georgia Andrew Spector MD, Durham, North Carolina Tessa Sugarbaker MD MFT, San Francisco, California Nathaniel F Watson MD MSc, Seattle, Washington Irving Lebovics DDS, Los Angeles, California Lisa Alexia PA-C, Alaska Matthew Anderson JD, Medford, Oregon Alexandra S Devin LCAT RDT, Beacon, New York Beverly Feldman RN MSN, Houston, Texas Prof Stacey Harmer, Davis, California Janet Huff LPC, Shreveport, Louisiana Betty Jung MPH RN MCHES, New Haven, Connecticut Gayle Kahn Friedman LCSW, Studio City, California Lynn McGovern MSc, Ireland Angela Miller MA BSEd, Springfield, Missouri Prof Kurt Niel, Grieskirchen, Austria Peter Varfalvy MSc, Quebec Elizabeth Wellburn MA, Victoria, British Columbia

Individuals represent personal views in endorsement of permanent Standard Time policy; they do not endorse as representatives of their employers.



AMA calls for permanent standard time

NOV 15, 2022

HONOLULU – At its Interim Meeting, the American Medical Association (AMA) House of Delegates on Monday supported ending daylight saving time and move permanently to standard time.

The American Academy of Sleep Medicine and others pointed to the potential health benefits of the move.

"For far too long, we've changed our clocks in pursuit of daylight, while incurring public health and safety risks in the process. Committing to standard time has health benefits and allows us to end the biannual tug of war between our biological and alarm clocks," said AMA Trustee Alexander Ding, M.D., M.A, MBA.

Although the chronic effects of remaining year-round in daylight saving time (which shifts daylight hours later in the evening) have not been well studied, sleep experts say that standard time (which shifts daylight hours earlier in the morning) aligns best with human circadian biology. Data show that the sudden change from standard time to daylight saving time in March is associated with significant public health and safety risks, including increased risk of adverse cardiovascular events, mood disorders, and motor vehicle crashes. Some studies suggest that the body clock does not adjust to daylight saving time even after a few months.

This year, the U.S. Senate passed a bill to establish permanent daylight saving time, but there is a lot of daylight between that version and the AMA-endorsed approach. The House has not taken up a bill on the issue. Twenty states have endorsed year-round daylight saving time, but Congress must act for the changes to take effect.

"Eliminating the time changes in March and November would be a welcome change. But research shows permanent daylight saving time overlooks potential health risks that can be avoided by establishing permanent standard time instead," Ding said. "Sleep experts are alarmed. Issues other than patient health are driving this debate. It's time that we wake up to the health implications of clock setting."

Media Contact:

AMA Media & Editorial ph: (312) 464-4430 media@ama-assn.org



SRBR Talking Points about Daylight Saving Time (DST)

The talking points are meant to briefly address some key points raised by the media and laymen responses per Public Outreach Committee (POC) of the Society for Research on Biological Rhythms (SRBR). This is by no means the full scope of references, but we do have the key references, as well as the SRBR Position Paper on DST enclosed in this press kit to support our responses to the media. Please feel free to reach out to a SRBR POC at srbroutreach@gmail.com in case you have any suggestions or comments.

Why do we care about Daylight Saving Time (DST)?

Approximately 1.6 billion people worldwide change their clocks twice a year to and from DST. This one-hour change in clock time to DST leads to decreased exposure to morning sunlight for some individuals (while DST is in place during the summer months in the US). Our body's internal biological clock needs exposure to morning sunlight to adjust to local time. When the exposure to sunlight in the morning is reduced, our biological clocks will drift later and later, making it harder to wake up. The one-hour shift in clock time during DST also exposes people to more evening light, which further pushes the biological clock to a later time and makes it more difficult to fall asleep. Because of the effect of reduced morning light and increased evening light on the biological clock, DST leads to sleep loss and a mismatch between the body clock and local time (also called social jetlag). Both sleep deprivation and social jetlag have negative effects on physical and mental health, including increased risks for diabetes, obesity, heart disease, depression, and some forms of cancer. Therefore, keeping DST during summer or all year round in the US, will have serious implications for public health and safety. These negative effects can be prevented by not switching to DST.

Why is permanent DST worse than permanent standard time?

DST means that we wake up in darkness and are exposed to more evening light, especially in the western parts of each of the time zones. Adhering to DST throughout the year would result in even more hours of morning darkness during winter for many people. This makes waking up more difficult for everyone, from school kids to adults, and is likely to worsen conditions such as seasonal affective disorders. Darker mornings and brighter evenings will push the circadian system later, and thus lead to later sleep timing. However, work and school hours do not change, so these later sleep times will result in more sleep deprivation and social jetlag (internal misalignment). As already mentioned, sleep deprivation and social jetlag have negative effects on physical and mental health, including increased risks for diabetes, obesity, heart disease, depression, and some forms of cancer. Brighter days and darker nights are critical for a healthier population year round. Thus, DST should be abolished, and we as biological rhythms experts clearly favor permanent Standard Time (when the clock times matches sun times).

Have we done permanent DST before?

In 1974, the United States decided to try permanent DST for two years, in order to save energy. At first, people were optimistic, with 79% in favor of the change. However, by February, after the first winter, support had dropped to 42%. This change of mind is likely due to the fact that waking up in the dark is harder. Keeping DST year-round also increases the duration of dark mornings in the winter! Most notably, energy savings were not seen under this permanent DST in 1974. In fact, permanent DST in 1974 in the US didn't make it for full two years: Congress rolled back the measure in a 383-to-16 vote, clearly demonstrating that this was a bad idea. Let's not replicate the errors of the past!

Is an increase in exercise during DST a good reason to stick to permanent DST?

Currently, DST occurs in spring, and ends after the summer. Those times of year are typically associated with more outdoor activities because of warmer temperatures. Although it has been argued that DST is associated with more physical activity during the summer months, it is more likely that the change in season is responsible for changes in physical activity patterns. It is also noteworthy that there is no direct evidence suggesting that permanent DST would be beneficial for physical activity during the winter months. Conversely, keeping Standard Time throughout the year (rather than DST) will not affect the seasonality of warmer temperatures and longer evening light in summer. Thus, it is unlikely that locking into Standard Time instead of DST will abolish the positive effects of exercise during the summer months.



End the Switch and Support PERMANENT STANDARD TIME

Every year, we make the switch between standard time and daylight saving time (DST) when we "fall back" to standard time in November and "spring forward" to DST in March. This annual switch is quite simply not good for our health. Data clearly shows that the abrupt change from standard time to DST in March is associated with significant public health and safety risks, including increased risk of adverse cardiovascular events, mood disorders, and motor vehicle crashes.

It's critical that we enact legislation to get rid of the switch between standard time and DST. However, permanent DST is not the answer. Instead, we should move to permanent standard time. Current evidence supports the adoption of year-round standard time, which aligns best with human circadian biology and provides distinct benefits for public health and safety. This position is shared by more than 20 medical, scientific, and civic organizations, including the American Academy of Sleep Medicine, American Academy of Neurology, American College of Chest Physicians, American College of Occupational and Environmental Medicine, National PTA, National Safety Council, Society for Research on Biological Rhythms, and World Sleep Society.

DST has been shown to lead to chronic sleep deprivation amongst adults and adolescents. Research has found that adolescents get less sleep and had longer reaction times, increased lapses in vigilance, and increased daytime sleepiness following the switch to DST. These effects are especially pronounced in children with autism who are especially susceptible to chronic sleep issues. Permanent standard time is the best option for health.

DST also leads to circadian misalignment - a mismatch in the timing between our biological clocks and our work, school, and sleep routines. This misalignment happens

when we are waking up in the dark to go to work or school or getting late evening light that can adversely affect the body's ability to fall asleep by suppressing melatonin. Circadian misalignment has been correlated with detrimental health effects, including cancer, cardiovascular disease, Type 2 diabetes, and neurodegenerative disease.

Congress previously enacted legislation to make DST permanent and repealed it less than a year later. During the 1974 energy crisis, permanent DST was thought to save energy by decreasing the need for electric lighting in the evening. However, energy savings from DST appear negligible, as air conditioning needs often increase in the late afternoon in the summer and heating needs often increase in the morning in the winter. In addition, the dark mornings were very unpopular, with sunrise arriving in DC and New York around 8:30am and not until around 9am in Detroit and Indianapolis. Moreover, a number of children were fatally struck by cars as they made their way to school in the dark. Permanent DST was repealed by Congress less than a year after its implementation. The House vote to end permanent DST was 383-16 and the Senate agreed in a voice vote.

AASM supports elimination of seasonal time changes in favor of a fixed, national, year-round standard time, which aligns best with human circadian biology and provides distinct benefits for public health and safety. For additional information contact Eric Albrecht at ealbrecht@aasm.org or AASM Washington Representatives Amy Kelbick at akelbick@mcdermottplus.com.



Editorial: A wake-up call to ditch Daylight Saving Time

Published: Mar. 23, 2022, 6:15 a.m.

By The Oregonian Editorial Board

Maybe it was residual grogginess induced by losing an hour of sleep with the start of Daylight Saving Time last week. But the U.S. Senate, in a rare bout of unanimity, voted to make Daylight Saving Time permanent starting in November 2023. The question now goes to the U.S. House of Representatives to consider.

Hopefully, representatives will be more clear-minded than their Senate counterparts when they take it up. Because the bill should either be significantly changed or ditched altogether. A mountain of research shows the detrimental health effects of forcing our bodies to operate out of sync with the sun, including less overall sleep and increased risk of heart disease. For Oregonians, keeping our clocks set to Daylight Saving Time year-round would mean sunrise would not occur before 8 a.m. for 106 days each year, as The Oregonian/OregonLive's Kristine de Leon reported. While this has huge implications for all, it's especially concerning for children who would have to wake up and get to school in the dark. When the U.S. briefly adopted year-round Daylight Saving Time in the 1970s, the automobile-caused deaths of eight children in Florida as they headed to school in the dark prompted the governor at the time to seek a reversal. Remember that's Florida – which sees more sunlight than the southernmost city in Oregon does from late September to mid March.

Certainly, there's wisdom in doing away with the switch to Daylight Saving Time in March and back to Standard Time in November that most states observe. Both Oregon Sens. Ron Wyden and Jeff Merkley noted the desire to end the back-and-forth time changes that wreak temporary but certain havoc on people's lives in their decision to back the Sunshine Protection Act. And as Wyden's spokesman noted, the federal bill expressly gives states the ability to opt out of Daylight Saving Time, allowing it to remain on Standard Time year-round instead.

But that exposes another problem – and a lack of foresight by legislators. Oregon legislators in 2019 passed <u>Senate Bill 320</u> to make Daylight Saving Time permanent everywhere but in Malheur County, which operates in the Mountain time zone. The bill, which had a baffling mix of Democrats and Republicans on both sides, was signed into law by Gov. Kate Brown. The reason it hasn't already taken effect? Making the change permanent needs approval by Congress, something that may now be happening.

The Senate's passage of the Sunshine Protection Act should be – yes, we'll say it – a wake-up call. Oregonians should read the <u>position statement</u> from the American Academy of Sleep Medicine calling for an end to Daylight Saving Time. They can check out <u>this op-ed by Portlander Kindra Crick</u> from two years ago, when Oregon legislators first passed SB 320, that includes links to multiple research papers on the negative effects of Daylight Saving Time. They can read <u>de Leon's story detailing</u> just how many days that Oregonians would start their days in the dark and what little sunlight that buys us.

And then Oregonians should focus their energy on contacting their representatives in the U.S. House and their legislators in Salem. They should urge them to stop such an irrational change at the federal level and, failing that, make sure that Oregon reverses SB 320 and seeks an exemption to remain in Standard Time. The marginal benefit of an extra hour of light during a limited number of summer evenings is not worth the tradeoff of spending nearly a third of the year's mornings in darkness.

-The Oregonian/OregonLive Editorial Board



EDITORIAL

Permanent daylight saving time: An idea whose time has not come again

Evidence is in short supply to justify the shift.

By Editorial Board (https://www.startribune.com/editorial-board/6390869/) Star Tribune | MARCH 26, 2022 — 6:00PM

Minnesotans' willingness to give permanent daylight saving time a try back in the 1970s was understandable.

Consumers were reeling from that era's steep inflation. Energy prices were particularly painful, with oil shortages the fallout from Middle East producers flexing their might.

No wonder 68% of those surveyed in a Minnesota Poll published Dec. 2, 1973, said they favored a shift to year-round daylight saving time (DST). If a simple clock adjustment could reduce energy demand and yield savings, why not give it a try? That same rationale led the U.S. Congress to pass legislation to leave clocks one hour ahead year-round beginning in early 1974.

Three months after this shift, Minnesotans had had a major change of heart. In a Minnesota Poll published March 20, 1974, 58% of those surveyed said they preferred standard time during the winter.

That historical reality should throw cold water on ill-informed modern-day proposals for a permanent DST shift.

If it didn't work in 1974, it's unclear why it would work now.

Yet there are bills with broad bipartisan support at the state and federal levels to make this switch again. One of them, the "Sunshine Protection Act (https://www.congress.gov/bill/117th-congress/senate-bill/623?

<u>q=%7B%22search%22%3A%5B%22sunshine+protection+act%22%2C%22sunshine%22%2C%22protection</u>," cleared the U.S. Senate with little debate but unanimous consent on March 15. It would make DST permanent <u>beginning in 2023 (https://www.rubio.senate.gov/public/index.cfm/press-releases?id=B7EE5AB2-E909-49B3-B0DF-4F1DC0AB49C6)</u>.

At the Minnesota Legislature, there are bills, SF 149 (https://www.revisor.mn.gov/bills/bill.php? b=Senate&f=SF0149&ssn=0&y=2021&keyword_type=all&keyword=daylight) and HF 72 (https://www.revisor.mn.gov/bills/bill.php?f=HF72&y=2021&ssn=0&b=house), calling for this as well. Sen. Mary Kiffmeyer (https://www.senate.mn/members/member_bio.html?leg_id=15302), R-Big Lake, has long been a champion (https://www.revisor.mn.gov/bills/bill.php? b=Senate&f=SF0149&ssn=0&y=2021&keyword_type=all&keyword=daylight) of ending the current "spring forward, fall back" clock shift. A companion bill in the House has a list of authors that includes prominent DFLers and fiery conservatives.

The state legislation, if passed, would be dependent on a congressional approval, which is sensible. Things would get confusing if Minnesota made this switch but other states did not.

Kiffmeyer's clock-flipping complaints are legitimate. The changes, as she said in a statement, are linked to a "statistical rise in car crashes, days missed from work, heart attacks and workplace injuries immediately surrounding the change. These issues emerge as a result of the sleep disruption and a chaotic transition."

Ending the twice-a-year clock change merits serious consideration. But the state and federal bills go beyond that to make DST permanent. That would be a mistake. If there is a shift, it should be to standard time.

The Star Tribune's archives help explain why. The 1974 change went into effect on Jan. 6 that year, trading darker mornings for afternoon daylight. On that day, the time change meant the sun rose in Minnesota around 8:50 a.m. (https://sunrise-sunset.org/us/minneapolis-mn/2022/1)

By Jan. 16, the Star Tribune was reporting two accidents that may have been linked to the unaccustomed morning darkness. In Duluth, a 3-year-old boy died when he and his mom were struck returning from a bus stop. In Austin, a car hit a crossing guard and two elementary students.

Parents were advised to add reflective materials to kids' coats. Local leaders called for later school start times to protect kids. Reports released nationally suggested energy savings were minimal. Not surprisingly, broad regret settled in. In October 1974, then-President Gerald Ford signed legislation undoing (legislation undoing (https://www.smithsonianmag.com/smart-news/what-happened-the-last-time-the-us-tried-to-make-daylight-saving-time-permanent-

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As the current Congress weighs DST 2.0, health experts are speaking out. If there is a permanent change, standard time is the clear choice. It provides more early daylight and most closely aligns with the body's natural wake-work-sleep rhythms. Misalignment has been linked to "increased cardiovascular disease risk, metabolic syndrome and other health risks," <u>according</u> (https://jcsm.aasm.org/doi/10.5664/jcsm.8780) to the American Academy of Sleep Medicine.

Simply put, "It's better to have light in the mornings than the evenings," said <u>Dr. Conrad Iber</u> (https://med.umn.edu/bio/dom-a-z/conrad-iber), a sleep medicine physician at University of Minnesota Medical School and M Health Fairview.

It's unclear why there's momentum this year behind the federal DST shift. A change that affects so many requires thoughtful consideration and solid evidence to justify it.

So far, both are in short supply. A pause, at the very least, is timely and necessary.

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Bloomberg Opinion

Opinion The Editors

Just Say No to Permanent Daylight Saving

Congress is once again toying with an idea that will likely make everyone miserable. There's a better way.

The Editors are members of the Bloomberg Opinion editorial board.

When has the U.S. Senate ever moved faster?

In less than 30 seconds Tuesday afternoon, lawmakers unanimously consented to make daylight saving time permanent. The <u>legislation</u> never even came up for debate. Senators were apparently <u>cranky</u> enough about losing an hour of sleep last weekend to basically say they'd had enough.

In one sense, reform is welcome. Changing clocks twice a year – a policy adopted during World War I to conserve electricity – is disruptive to people's sleep and health. It's been associated with a rise in heart attacks, strokes and mood disorders; a spike in morning car crashes; and widespread discomfort, whining and unhappiness. By one estimate, the time shift costs the economy some \$434 million annually.

Sticking with the same time all year, then, would surely make sense. But why choose daylight saving time without a moment's consideration of the alternative?

Standard time is better aligned with the position of the sun and human nature. It generally synchronizes people's waking with sunrise and bedtime with darkness, in accordance with circadian rhythms. It also enables children and adults to go to school and work in daylight.

DST effectively does the reverse. By increasing exposure to morning darkness and evening light, it shifts body clocks later in the day and makes it difficult to fully wake up or easily fall asleep, a particular hazard for children. Having to be at school or work unnaturally early leads to "social jet lag," which is associated with a higher risk of obesity, heart disease and depression. As for conserving energy, the original rationale? Studies suggest DST may in fact do the opposite.

Of course, DST has its benefits. Some businesses – such as golf course operators and retail stores – may prefer giving customers an extra hour of sunlight on their way home from work. (Coffee shops might feel differently.) Added daylight also seems to be associated with a decrease in robberies and in evening car crashes. And many people simply prefer the extra afternoon light: In fact, a solid plurality of Americans now say they want to make DST permanent.

Perhaps they don't remember how <u>unhappy</u> everyone was the last time Congress imposed year-round DST, during the oil embargo of the early 1970s. Although the change was popular at first, late sunrises in the dead of winter soon weighed on people's minds. Energy savings proved negligible. Stories about children being injured or killed in accidents while walking to school in the dark gained national attention. Support for the initiative plunged by 37 percentage points in <u>just three</u> months. Congress soon reversed course entirely.

It will now fall to House lawmakers to once again determine the fate of daylight saving time. Before repeating a failed experiment, they should slow down and shed some more sunlight on this debate.

To contact the senior editor responsible for Bloomberg Opinion's editorials: David Shipley at davidshipley@bloomberg.net



Mexico falls back but won't spring forward as summer time abolished

Congress votes to scrap daylight saving and just keep standard time, meaning end to changing clocks twice a year

Lillian Perlmutter in Mexico City

Thu 27 Oct 2022 05.30 EDT

edro López, an office worker in the Mexican state of Veracruz, gets up before dawn, and drives in the moonlight an hour and a half to his job. "Leaving my house in the dark every single day and driving under the moon is horrible, especially in a landscape as beautiful as Veracruz," he said.

But, for half a year at least, he'll be driving in the sunlight. Mexico's congress voted on Wednesday to abolish summer time, and when Mexicans set their clocks back this weekend, it will be for the last time. In March, they will not be turned forward.

López is among the 40% of Mexicans who recent polls suggest support the change; 35% oppose the shift. "I assume it depends on what kind of work schedule you have, but I think for the majority of us in the middle class, returning to God's schedule will be magnificent," López said. (In the winter months, shorter days mean he'll still have to make his commute in the dark.)

Mexico is just the latest in a string of countries, states and territories contemplating an end to the annual round of "spring forward, fall back".

One study, published by the National Autonomous University of Mexico, found that summer time only saved the country 0.16% in energy costs per year, and led to various negative side effects among the population, such as difficulty paying attention at work and school.

While American summer time, called daylight saving time, runs from March to November, Mexico has held summer time from March to October since 1996. This creates an odd purgatory for several weeks every six months when Mexico City does not align with the Central Time Zone.

The outliers to Mexico's schedule are the northern state of Sonora, which follows Arizona's specific schedule, and Quintana Roo, which keeps American daylight saving time to ease the experience of tourists at Cancun resorts. These states will continue their current practices under the new law.

Adding another element of confusion into the new regulations, large cities that border the United States, such as Juárez, Tijuana and Mexicali, will continue to use American daylight saving time to ease commerce. Driving just several kilometers outside the city will set the clocks back an hour for half the year.

Martha García, a massage therapist in Nuevo Laredo, one of the affected cities, said the exception makes sense, despite the inconvenient divide between urban and rural areas. "Of course it will affect us, keeping a different time than the interior of the country, but it's important to understand that our everyday lives and work are already more connected to the United States."

Bety Beza, an administrative worker in Monterrey, Nuevo León, said she thought summer time brought zero advantages with its promise of more light. "It only made it so I had to wake up even earlier to work. The new law won't just affect my life, it will benefit my life," she said.

DAILY WIRE

Return To God's Time By Rejecting The Senate's Plan To Make Daylight Saving Time Permanent

By Tim Meads

Mar 15, 2022 DailyWire.com

Not only can the American people be bribed by Congress with their own money in the form of handouts and COVID-cash, it appears we can even be bribed by our very own time. On Tuesday, a bipartisan duo of Senators Marco Rubio (R-FL) and Sheldon Whitehouse (D-RI) <u>introduced</u> the "Sunshine Protection Act." Currently, Americans are in Daylight Saving Time from March through November. From November through March, we're in Standard Time. Under the Sunshine Protection Act, we would not revert back to Standard Time in November 2023. It would make Daylight Saving Time permanent forever.

After unanimously passing the Senate, it now heads to Congress for final approval before making its way to President Joe Biden's desk, if approved.

It is being widely praised, but a look at God, government, and science would tell us this bill is not what is needed. We should do away with changing our clocks twice a year, but our country needs to be on Standard Time forever due to some critical reasons of health, national pride, and in accordance with God.

A look at the history of Daylight Saving Time would lead one to conclude that the federal government screwed all of this up in the first place. Their new plan would irrevocably put the country on an artificial time contrived by government busybodies who should have never gotten involved with it to begin with.

Let us start with something right away — contrary to popular belief, American farmers were not behind the impetus for Daylight Saving Time. They actually hated it.

Why?

Well, Cows don't care what time the clock says or if it is dark or light. They need to be milked when they need to be milked. The introduction of Daylight Saving Time – moving the clock ahead one hour for more light in the evening – meant that farmers were tending the cows in the dark in the early morning.

So, if farmers were not behind it, then who was? Like all unholy things, it was a marriage of big government in bed with big business.

Throughout the 19th century, there wasn't exactly a standard time in the United States, The New York Times <u>recently</u> <u>reported</u>. In Boston it could be 12:15, then 12:10 in New York City, and so on and so forth.

But with the advent of the railroads, that made selling tickets and planning arrival and departure times rather difficult. So – in an effort to stave off government interference on the matter – the railroad industry implemented its own timezone and standard time.

According to The New York Times, Evangelical Christians were <u>largely opposed</u> to it. They felt that it was messing with the natural order of things and the railroads had no place doing so, but it didn't matter.

That business-oriented concept of time stuck until 1916 during World War I. Germany instituted Day Light Saving Time to save energy costs by having more daylight hours.

Western nations soon followed and in 1918, the United States Congress, in a moment of globalist fervor, said, "Not a bad a idea, let's be like the rest of the world!" They took over time zones and implemented a Daylight Savings plan, which was the

first year Americans lost sleep in the spring.

According to historian, Michael Downing, the move was not popular:

"When the Congress poked its finger into the face of every clock in the country, millions of Americans winced," Downing wrote. "United by a determination to beat back the big hand of government," daylight saving time opponents "raised holy hell, vowing to return the nation to real time, normal time, farm time, sun time – the time they liked to think of as "God's time."

But remember, if pros and cons are opposite, then the opposite of progress must be Congress.

The federal government barreled ahead with it for the most part for one year but actually allowed states to decide whether to adopt the matter altogether beginning in 1919 until World War II. Then, DST was re-implemented federally. In 1966, Congress formally adopted the Uniform Time Act to make the change from DST-ST permanent.

A version of that bill has dictated to all Americans for half of a century how to set our clocks.

But, Rubio and Whitehouse's bill looks to end it by making DST permanent, with some exceptions. Standard Time, or natural time, would for the most part be abolished.

Now, we have talked about God, and we've talked about people who think they're gods (the government), but what do scientific experts have to say on the matter? Do they agree with the Rubio and Whitehouse bill?

Not all of them do. Some experts believe that DST is dangerous because it disrupts the natural circadian rhythm. In other words, some doctors believe our body is more naturally in sync with Standard Time.

"In the spring, you are essentially losing an hour of sleep when that clock moves forward in the middle of the night," Dr. James Wyatt, a clinical sleep disorder specialist at Rush University Medical Center, recently told PBS.

"But another thing that happens is that you are waking up at an earlier time relative to your body's circadian system. You are trying to be awake with sleep deprivation at an earlier clock time. And then the circadian system thinks it's daytime," Wyatt said. "Fundamentally, [daylight saving time] is putting more strain on your body causing heart attacks and strokes."

Dr. Sabra Abbott, a sleep medicine specialist at Northwestern Medicine, concurred with that assessment.

"It is much healthier to get more of that light in the morning than in the evening," Abbot advised.

"There are a lot of studies that show that if you live in the Western side of the time zone, where you are getting less of that morning light, there are higher rates of cancer, depression rates go up if you don't have that morning light," she <u>continued</u>. "So, as a community, the sleep field feels like standard time year-round is the best approach."

So there you have it. The Rubio and Whitehouse plan to make DST permanent is an abomination to Americans, science, and morality. It seems as if the government is doing something good. But they aren't. They're forcing everybody to jump aboard a concept of time that it created in the first place.

The bill should be amended to make "standard time" - not DST - permanent. That is the natural order of things.

A keen reader might be saying, "Well, wait a minute. Evangelicals were opposed to timezones as a whole. Shouldn't we get rid of those, too, to be on so-called God's time?" Well, the author of this piece is Catholic, not a fundamentalist, so that ecumenical difference is going to have to be compromised, lest a religious debate in the comments section breakout.

In short, let's not be bribed with our own time. The government took it, now they're trying to give a cheapened version of it back.



#EndDST

Changing the clocks is anti-health, anti-science, and anti-family.



Scott Lincicome
Oct 27, 2021

Dear Capitolisters,

In the coming days, tens of millions of Americans and their children will participate in a silly, unhealthy annual ritual rooted in mysticism and superstition. And they'll also celebrate Halloween.

The silly ritual to which I'm referring, of course, is our semiannual tradition of changing the clocks to accommodate daylight saving time (DST)—an onerous state time mandate detrimental to public health and safety, manipulated by corporatists, supported by a handful of childless insomniac socialites, and based on so-called "science" debunked decades ago. Indeed, even the name "daylight saving time" is a lie: The ritual merely shifts time; it doesn't save anything—except, perhaps, a few jobs on K Street and in the <u>Florida leisure industry</u>.

And so, my friends, it's time I provided a full-throated explanation of why DST should be eliminated, *before* it's too late.

(i.e., next Sunday.)

DST: A Classic Case of Government Failure

Perhaps the easiest and most obvious criticism of DST is that the policy has utterly failed to achieve its primary aim—energy conservation. Originally adopted in 1918 during World War I, reinstated during World War II, and finally made permanent under the Uniform Time Act in 1966, DST was intended to (somehow) save electricity by requiring less light in the evenings. However, real-world studies repeatedly have shown that DST not only doesn't conserve energy, but may actually *waste it*. For example, a 2008 <u>study</u> from the National Bureau of Economic Research found that DST increased residential electricity demand in Indiana by about 1 percent, as reduced demand for lighting was more than offset by increased demand for heating

and cooling, especially in cold-morning Octobers. The policy therefore cost Indiana households an extra \$9 million per year, plus annual "social costs of increased pollution emissions that range from \$1.7 to \$5.5 million"—costs that the authors predict are likely even higher in other parts of the United States. Indeed, DST's net energy drain is probably even bigger today, as it's been extended into November (thus raising heating/cooling costs) while electricity savings from keeping the lights off have shrunk because today's light bulbs are more efficient (and thus cheaper to keep on).

A separate <u>study</u> from Australia made similar conclusions, finding that decreased lighting use in the evenings was offset by increased use in the mornings. And that's just electricity. Other studies show that DST could increase other types of energy consumption. For example, a <u>1993 study</u> found that DST causes both "a rise in evening traffic and ... an increase in fuel consumption and hence a higher pollution level in the atmosphere," as well as "a rise in secondary pollutants" due to shifted traffic patterns. Others have <u>found</u> the same. Overall, there's <u>no evidence</u> that DST significantly decreases energy consumption.

Despite this policy failure, DST not only persists but actually has been repeatedly expanded to cover more and more of our year, thanks—as Michael Downing, author of Spring Forward: The Annual Madness of Daylight Saving Time, explains—to intense lobbying by the U.S. industries that benefit financially from lighter evenings. Contrary to the conventional wisdom, however, it wasn't farmers who wanted DST—they actually opposed it because they "now had an hour less of morning light to milk their cows and get their goods ready for market, let alone for commuters or children waiting for school buses in the dark." Instead, the original, post-war implementation of DST was driven by the oil and gas companies that enjoyed the additional gasoline consumption. The gas and fuel industries were then joined by the golf, home improvement, and barbecue/patio industries to lobby for the 1986 expansion of DST from six to seven months, because each industry gained hundreds of millions in additional sales revenue each year because of the extended evening daylight hours. Finally, the 2005 expansion of DST—from seven months to eight (second Sunday in March to first Sunday in November) was driven by the National Association of Convenience Stores (NACS) and <u>U.S. candymakers</u>, each of which wanted Halloween to occur during DST because it boosted candy and, again, gasoline sales. "It gave the children more time to trick or treat and eat more candy ... and the NACS credits that extra month of daylight saving with a \$1 billion increase in annual [gasoline] sales." (Big Candy also supported the 1986 expansion but had to lobby for another two decades before achieving the Halloween breakthrough.)

As we've <u>discussed</u>, political pressure has long kept many U.S. government programs afloat for decades after they've been proven to be "unqualified failures." DST is no different.

DST Is Anti-Health and Science

The policy also imperils Americans' health and safety. For starters, the semiannual time change <u>results in all sorts of maladies</u> in the days thereafter: car crashes and pedestrian deaths; workplace injuries; heart attacks and strokes; <u>depression</u>; and "<u>adverse medical events</u>" because of "human error." (*Mental note: Don't get hurt/sick on time-change weekends.*)

A switch to permanent DST, moreover, wouldn't solve many of the policy's current risks. For starters, dark mornings caused by DST in April and October endanger millions of children forced to wait for the school bus before sunrise. <u>Indeed</u>, "when temporary, year-round DST was adopted in response to an Organization of the Petroleum Exporting Countries (OPEC) oil embargo, increased fatalities among school-aged children in the morning were noted between January and April. These findings may be due to darkness lasting longer in the morning when children are traveling to school, while other factors also may be at play."

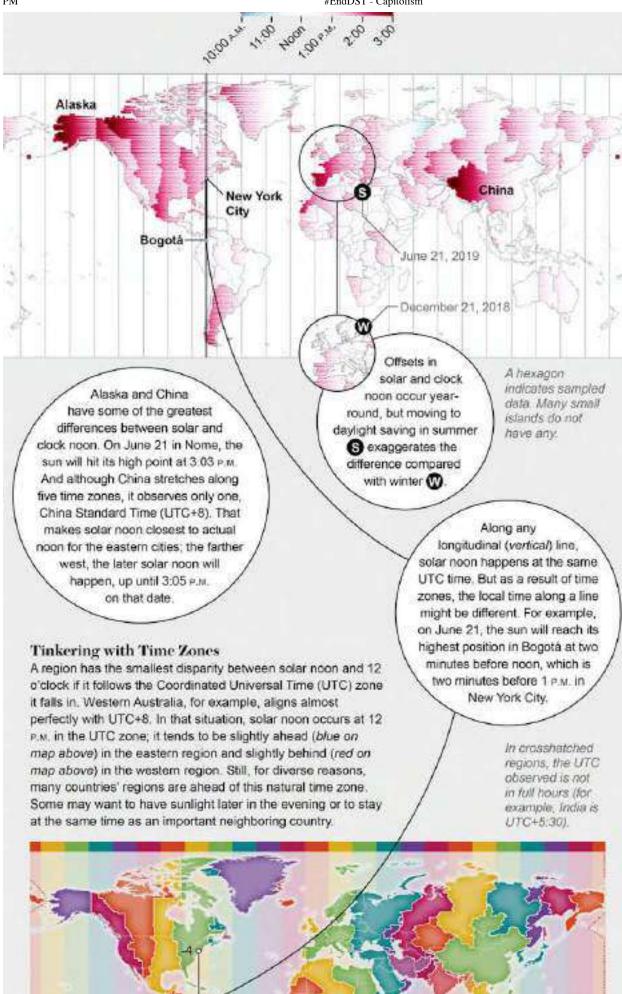
Dead children. My God.

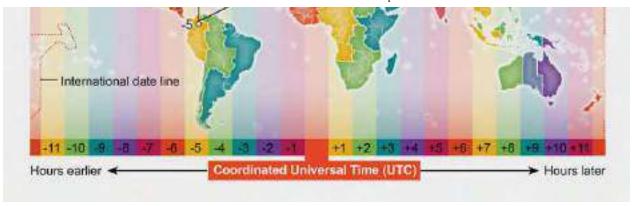
DST also causes health problems for adults because it screws with our natural circadian rhythms. As the *Wall Street Journal* explains:

The fall-winter clock, known as standard time, is closer to the sun's natural rise and set, meaning it is more aligned with our internal clocks that tell us to sleep at night and wake at daylight. When clocks spring ahead in March and daylight lasts longer in the evening, the cues to go to sleep come later than our biological clocks are accustomed to, says Till Roenneberg, a sleep researcher and professor of chronobiology at the Ludwig Maximilian University of Munich.

Put another way, timekeeping (and, thus, our clocks) evolved over centuries to have the sun peak overhead at noon in most places, but DST radically shifts the clock so that the sun peaks much "later" in the day—thus screwing with our internal clocks. As shown in the following chart, for example, DST causes the sun on June 21 (the longest day of the year) to reach its proper, *noontime* position at *almost 3 p.m.* in several parts of the country:

Local Time When the Sun Is Highest Overhead June 21, 2019 (summer solstice)





Given how this disrupts our biological clocks, many health experts, chronobiologists, and medical organizations have called for DST's elimination. In fact, the American Academy of Sleep Medicine—joined by dozens of other, very reputable medical organizations—last year published a detailed "position statement" in the prestigious *Journal of Clinical Sleep Medicine* advocating a change to permanent standard time because it is "best aligned with human circadian biology and has the potential to produce beneficial effects for public health and safety." They further cite the scientific research to back their position up:

DST is less well-aligned with intrinsic human circadian physiology, and it disrupts the natural seasonal adjustment of the human clock due to the effect of late-evening light on the circadian rhythm. DST results in more darkness in the morning hours, and more light in the evening hours. Both early morning darkness and light in the evening have a similar effect on circadian phase, causing the endogenous rhythm to shift to later in the day. There is evidence that the body clock does not adjust to DST even after several months.

Permanent DST could therefore result in permanent phase delay, a condition that can also lead to a perpetual discrepancy between the innate biological clock and the extrinsic environmental clock, as well as chronic sleep loss due to early morning social demands that truncate the opportunity to sleep. The chronic misalignment between the timing of demands of work, school, or other obligations against the innate circadian rhythm is called "social jet lag." Studies show that social jet lag is associated with an increased risk of obesity, metabolic syndrome, cardiovascular disease, and depression.

Real-world experiments with permanent DST confirm these harms, which outweigh any possible <u>public safety benefits</u> (benefits that a few more streetlamps could also achieve, by the way). Russia, <u>for example</u>, "tried to go on permanent summer time, but changed to permanent winter time in 2014 after the summer-time-in-winter change gave people stress and health problems when it stayed darker for longer during winter mornings."

But, hey, at least Big Candy is happy.

DST Is Anti-Family

Misguided DST advocates often claim that unnaturally light evenings benefit children because they can play outside later, but this argument falls flat for several reasons. First, as already noted, DST's dark mornings endanger these same children—put simply, little Timmy can't play baseball at 9 p.m. if he's been permanently maimed in a morning bus accident. Second, DST's time-changes, dark mornings, and bright evenings make it harder for parents to get their kids up for school or to bed at night—decreasing the children's sleep quality, destroying meticulously scripted sleep schedules, and dramatically increasing family strife (trust me). None of this is good for kids' or parents' health or sanity—no wonder, then, that parents (well, the good ones, at least) hate DST with such a passion.

Finally, the kids would still have plenty of time to play in the evenings during the months most amenable to outside play. As this *Washington Post* example <u>shows</u>, for example, dusk would still be after 6 p.m. between March and September and after 7 p.m. May through August. (And it wouldn't be truly dark for even longer.)

Sunrise and Sunset in D.C. without DST

(Orange = change from current schedule)

| Date | | |
|---------|---------|---------|
| Jan. 1 | 7:27 am | 4:57 pm |
| Feb. 1 | 7:14 am | 5:29 pm |
| Mar. 1 | 6:40 am | 6:01 pm |
| Apr. 1 | 5:52 am | 6:32 pm |
| May 1 | 5:10 am | 7:00 pm |
| Jun. 21 | 4:43 am | 7:37 pm |
| Aug. 1 | 5:09 am | 7:19 pm |
| Sep. 1 | 5:37 am | 6:38 pm |
| Oct. 1 | 6:04 am | 5:50 pm |
| Nov. 15 | 6:50 am | 4:54 pm |
| Dec. 21 | 7:23 am | 4:49 pm |

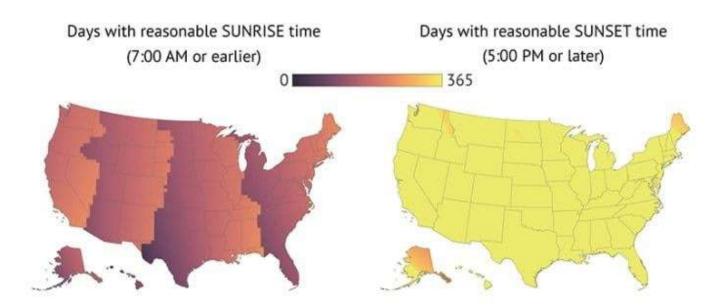
By: Justin Grieser

Source: timeanddate,com

Sure, some late-night revelers who overindulged might struggle with a few light mornings in the summer, but personal suffering is often the only way to learn needed life-lessons, and that's what blackout curtains are for, anyway.

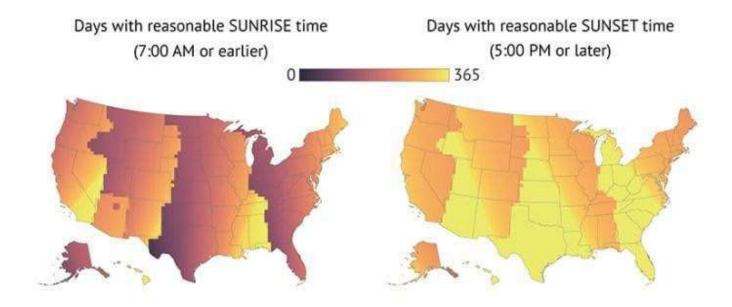
As an aside, the table above gets to two massive errors that today's DST zealots usually commit, *i.e.*, that standard time *causes* shorter days instead of just aligning clocks with the sun and human biology, and that DST is more reasonable because it reflects most Americans' waking hours. The former claim is flat-earther nonsense that ignores the <u>earth's tilt</u> and thus deserves no further mention. The latter claim, on the other hand, might *seem* more legitimate but turns out to be equally absurd. As this excellent analysis (with interactive maps!) <u>shows</u>, in fact, there are far more unreasonably dark mornings under permanent DST than there are unreasonably dark evenings under permanent standard time—even when using a far-too-late 7 a.m. start to the day:

If Daylight Saving Time were always in effect



Even the current system—with the time changes and their myriad health/safety problems—severely disadvantages reasonable mornings in the vast majority of the country:

Daylight Saving Time as currently observed



It's thus a myth that DST is somehow a "fair" or "reasonable" balance between productive families who need lighter mornings and lollygagging singles who want to do Lord-knowswhat all night. The system is heavily biased toward the latter.

No wonder American birth rates are falling.

DST Is Anti-Economy

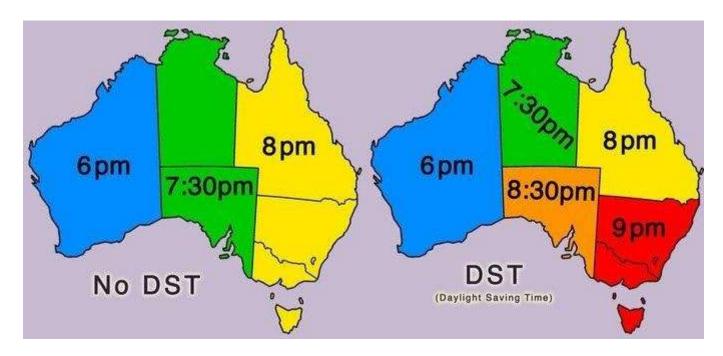
DST's supposed economic benefits have also been wildly oversold. Sure, the fat-cat golf industry and its leisure industry co-conspirators might benefit from unnaturally light evenings, but those "gains" come at many others' expense. For starters, companies that could benefit from longer, lighter mornings—cafés, fitness centers, airports, etc.—are on the losing end of this redistribution, forced to enrich the leisure cronies with their hard-earned business. Then there are the broader economic harms. The semi-annual time switch, for example, is associated with decreased workplace productivity ("cyberloafing"), missed workdays due to injury, financial market losses, and harsher criminal sentencing by sleep-deprived judges. Thus, researchers have found that DST's time change alone costs the American economy hundreds millions of dollars each year—and "we don't regain that productivity when the fall change adds an hour to our schedules."

It's all but certain, moreover, that DST's permanent health harms (e.g., the aforementioned "social jet lag") also undermine American workers' performance. Indeed, research shows that adults' peak productivity and analytical performance occur in the morning (thanks again to

those circadian rhythms), while mundane tasks are best left to the afternoon. National surveys show much the same, with workers' peak productivity time occurring before noon in all but four states (and none after 3:30 p.m.). DST's anti-morning bias thus likely harms national productivity (and thus the economy), even after the time-change fatigue wears off. (Sure, this doesn't apply to a few weird night owls, but studies show they just never matured.)

The Slippery Slope

Finally, there is the continued risk that the government—funded by Big Business and drunk with power over *time itself*—takes its interventions too far, with dangerous or even absurd results. Don't believe such a slippery slope exists in this case? Well, *then feast your eyes upon what Australia just did*:



A simple return to time originalism (aka, permanent standard time)—and thus a commitment to keeping our clocks as closely aligned to nature as possible—is the only way we can eliminate the incentive for K Street lobbyists and Beltway Insiders to do something equally ridiculous.

Summing It All Up

Daylight saving time hasn't achieved its primary public policy goal—energy conservation—and may actually undermine it, imposing significant environmental, health, safety, family, and economic harms along the way. Despite these facts, lobbying by powerful industry groups and a handful of late-sleeping lollygaggers not only has protected this failed government program, which annually steals an hour of our lives and months later returns it interest-free, but has

actually *expanded* it—thereby thrusting tens of millions of American workers and families into abject darkness for even longer.

Cynics might say that change here is impossible, that the forces of Big Business and American political dysfunction are too strong to overcome, but such pessimism ignores history both here and abroad. Countries around the world, for example, have <u>ditched the practice</u> in recent years, and Europe could be next: In 2018, the European Parliament <u>voted</u> 384-153 to review "whether Daylight Saving Time is actually worth it," due to "growing dissatisfaction" with the system. Here at home, Americans have beaten back the DST menace not once, but twice—abandoning it after <u>WWI</u> ("it proved unpopular") and again in the 1970s, after those unfortunate bus stop accidents.

Let's hope that it doesn't take even more needless harm to our children before we act again.

MD-SB0268-OPPOSED-AASM.pdf Uploaded by: Jennifer Martin

Position: UNF



March 6, 2023

Jennifer L. Martin, PhD

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Maryland Senate The Honorable Bill Ferguson, President Maryland State Capitol Annapolis, MD 21401

RE: SB0268 - Full-Year Daylight Savings Time - OPPOSED

Dear President Ferguson and Honorable Members of the Maryland Senate:

The American Academy of Sleep Medicine (AASM) **OPPOSES** SB0268 introduced by Senator Ready. The AASM supports the elimination of the biannual time changes in March and November but is advocating for legislation restoring permanent standard time. The AASM has a combined membership of 12,000 accredited sleep centers and individuals, including physicians, scientists and other health care professionals.

As described in an AASM <u>daylight saving time position statement</u>, standard time aligns best with human circadian biology. Standard time is closely aligned with the position of the sun, which is important for the body because sunlight is the most powerful external cue for the human circadian rhythm. This internal "body clock" regulates the timing of alertness, sleepiness, and other biological functions.

By artificially shifting the clock time an hour forward, daylight saving time causes a misalignment between clock time and solar time, interfering with our circadian timing. This disruption results in a condition known as "social jet lag," which is associated with an increased risk of obesity, metabolic syndrome, cardiovascular disease, and depression. If daylight saving time becomes permanent, then your constituents will be living with social jet lag year-round.

Rather than "saving" light, daylight saving time shifts the clock time of daylight hours later in the day, causing it to remain dark later in the morning, which is especially problematic for people who experience seasonal affective disorder. Morning sunlight is essential for mood regulation, especially during the shorter days of winter.

The long, dark mornings caused by permanent daylight saving time also would make it difficult to wake up for school and work in the winter, and the safety of children would be jeopardized while waiting at the bus stop and walking to school in the dark. These concerns caused public support for permanent daylight saving time to plummet after Congress enacted the Emergency Daylight Saving Time Energy Conservation Act of 1973. After just one winter of permanent daylight saving time, the trial was aborted, and Congress reversed course by amending the legislation to reinstate standard time during the winter months beginning in November 1974.

Please vote **NO** on this bill for the health and safety of the citizens in your state.

Sincerely,

Jennifer L. Martin, PhD President



SB 268.Daylight Savings Time.pdf Uploaded by: John Woolums

Position: UNF



BILL: Senate Bill 268

TITLE: General Provisions – Full Year Daylight Savings Time

POSITION: OPPOSE

DATE: March 7, 2023

COMMITTEE: Education, Energy, and the Environment

CONTACT: John R. Woolums, Esq.

The Maryland Association of Boards of Education (MABE) opposes Senate Bill 268, which is intended to require the standard time in Maryland to be Eastern Daylight Time year-round and establish year-round Daylight Savings Time (DST) in the State.

MABE shares the concerns of our local boards of education that one the most foreseeable outcomes of adopting year-round Daylight Savings Time would be negative impacts on school system efforts to establish later school start times. Local boards of education have been responding to parent and student input in recent years to consider major revisions to the organization of the school day, focusing primarily on adopting later start-times for high schools.

System-wide reforms to adopt later school start-times involve significant study and alignment of policies and budgets provide necessary modifications to student transportation scheduling, numbers of school buses and drivers, and impacts on after school activities. Much of this work has been undertaken in recent years, without consideration for the potential adoption of year-round Daylight Savings Time. In this way, legislation demanding such a change would further complicate an already complex set of considerations in adapting school day schedules and start times to best meet the needs of students.

MABE and all local boards of education recognize that developing a healthy school environment which promotes student health, well-being, and the ability to learn must be our highest priority. In this context, several local boards have adopted or are considering adopting later school start times based on assessments of the impact on student health, safety, and student developmental needs. Under Senate Bill 268, and a permanent shift to Eastern Daylight Time, the sun would not rise until approximately 8:30 a.m. during the shortest days of winter. As a result, students would be walking to school or bus stops in the dark for many more winter mornings during the school year.

MABE recognizes and appreciates that Senate Bill 268, unlike other similar legislation, would make Maryland's transition to year-round Daylight Savings Time contingent on federal law being amended to allow a state to observe a year-round standard time that is consistent with Eastern Daylight Time. However, MABE believes the potential negative consequences of that eventual outcome warrants the legislature's rejection of the proposal to enact legislation that could be triggered by this federal action.

For the reasons outlined above, MABE requests an unfavorable report on Senate Bill 268.

SSL MD SB 268- Oppose.pdfUploaded by: Lisa VanBuskirk Position: UNF



March 3, 2023

Good Afternoon Chair Feldman, Vice Chair Kagan, and Members of the Education, Energy, and the Environment Committee,

I am Lisa VanBuskirk of Start School Later Maryland. Thank you for the opportunity to testify. This is my fourth year testifying before you in **opposition to permanent Daylight Saving Time**, specifically SB-268.

The goal of my all-volunteer organization is to educate communities and policy makers about the physical and mental health, safety, and academic benefits of age-appropriate school hours. My organization opposes permanent Daylight Saving Time because of the safety concerns regarding morning winter darkness and the negative impact on the circadian rhythm and health of every Marylander.

What is the difference between permanent Daylight Saving Time vs the status quo or permanent Standard Time at this time of year? It is the difference between sunrise on the opening day of the Maryland General Assembly being at 8:24 a.m. versus 7:24 a.m. If you came to Annapolis at 7:30 on the Opening Day under permanent DST, the State House would look like the photo on the left (below). If you came to Annapolis at 7:30 this year, the State House looked like the photo on the right (below). For the bill's March 7 hearing, sunrise is at 6:29 a.m. under Standard Time. Seven weeks into session and the daylight is already increasing in the morning and evening, but under permanent Daylight Saving Time, sunrise would only barely be before 7:30 a.m.





Photos taken by Lisa VanBuskirk, March 1, 2022-Comparision of Daylight Saving Time (left) vs Standard Time (right) at sunrise.

I acknowledge the negative health and social impacts society bears when we switch from Standard Time (ST) to Daylight Saving Time every March. The very day of my first testimony in opposition to permanent Daylight Saving Time in March 2020, many newspapers published stories about the negative effects of switching back and forth and the call by circadian scientists to move to permanent Standard Time and do away with Daylight Savings Time altogether, the complete opposite of this proposed legislation. In 2020, the Baltimore Sun Editorial Board opposed permanent DST. The latest sunrises of the year in Maryland occur in late

December through early January, which would be at about 8:25-8:39 a.m. depending on where you are in the state. Civil dawn, the 30 minutes or so before sunrise, when it is light enough to see without artificial illumination, would therefore begin at about 8 a.m. Supporters may argue that sunrise would only be that late for a few days, but sunrise would be after 8 a.m. from the end of November to the beginning of February.

Our circadian rhythm is regulated by sunrise, not sunset. A permanent delay of sunrise time would put all of us on a perpetual "social jet lag" which would be most noticeable in the winter. This would affect our physical and emotional health and well-being, but would be particularly exacerbated for adolescents, who already experience a well-documented delay in sleep and wake times. Permanent Daylight Saving Time, combined with the current too-early school start times, would have an even greater negative impact on adolescent circadian rhythm, safety, health, and academics, and is contrary to the intent of previous state legislation regarding school bell times, including 2014's HB 883 and 2016's HB39, both of which were sponsored by new Lieutenant Governor Aruna Miller.

As you probably saw in the news last spring, the U.S. Senate by unanimous consent, advanced the Sunshine Protection Act and permanent Daylight Saving Time for the nation.³ Unanimous consent is not quite the same as a unanimous vote though, and you as legislators, surely understand such a nuance. Following the Senate's action, there were quite a number of articles about Daylight Saving Time, many which noted the unpopularity of permanent Daylight Saving Time in 1974, extra impact on adolescent biology and school start times, and concerns about morning darkness and student safety, especially for northern states.

I appreciate the quote from then House Majority Leader and Maryland Representative Steny Hoyer in a 2022 article in Politico: "How are people going to feel at 7 o'clock in the morning in December, when they put their kids out on the street to catch the school bus, and it's dead, flat dark? In any event, I don't have strong feelings either way," Hoyer chuckled. "I happen to like daylight savings time, but I don't send a kid to school."

¹ https://www.wsj.com/articles/heres-why-health-experts-want-to-stop-daylight-saving-time-11583340645?fbclid=lwAR0YLjCfiS D7RMQi55jqaXYUuKUORnk-o5GmmiQCgdOKbzAkLJyijB1Wmc

² https://www.baltimoresun.com/opinion/editorial/bs-ed-0309-daylight-savings-blues-20200306o3dst4scwzchhgu7ywztuzpdk4-story.html

³ https://www.politico.com/news/2022/03/15/here-comes-the-sun-senate-moves-to-make-daylight-savings-time-permanent-00017451

⁴ https://www.politico.com/news/2022/03/15/here-comes-the-sun-senate-moves-to-make-daylight-savings-time-permanent-00017451

I would, however amend Representative Hoyer's quote to acknowledge that some school days in Maryland it will be dead, flat dark at 8 a.m. when parents are putting students on buses. When people say they like Daylight Saving Time, I think they mean they like the switch in March because it comes at a time when the day is lengthening quickly anyways and they appreciate spring sunshine, they rarely consider the potential for dark winter mornings.

Last year, the Maryland Association of Boards of Education opposes permanent Daylight Saving Time. ⁵ I assume they will submit similar opposition this year. Likewise, I know Anne Arundel County Public School opposed permanent Daylight Saving Time the past two years and hope that they again submit testimony. ⁶ This school year, Anne Arundel County implemented new school hours aligned with student biology. Permanent Daylight Saving time would negate the Board's action, which was nearly three decades in the making. Similarly, last month Howard County's Board of Education approved on new school start and dismissal times for next school year, to better align with adolescent circadian rhythms. Likewise, this bill would negate their effort.

Although SB268 does not require adjacent states to also pass permanent Daylight Saving Time legislation, it should be noted that our neighbors are mixed on the topic. Delaware passed such legislation in 2019. In the 2022 legislative session, Pennsylvania considered legislation for both permanent Standard Time and permanent Daylight Saving Time, while Virginia and West Virginia considered legislation for permanent Standard Time. None of the 2022 bills were enacted. In January, Virginia's Senate defeated SB-1017, a permanent Daylight Saving Time bill. While politicians may not have consensus on the best time to keep, sleep and health experts agree permanent Standard Time is the best.

In 1974, the entire nation tried permanent Daylight Saving Time, but it was a disaster with the extra morning darkness. The deaths of eight children in Florida and one in Connecticut were blamed on unsafe DST morning darkness within the first month. Congress reversed its decision later that same year. Enclosure 1 and 2 are articles from the Baltimore Sun covering the 1974 DST fiasco. In 1974, Anne Arundel County Public Schools and Baltimore County Public Schools delayed their school start times by 30 minutes due to safety concerns and several "near-miss" accidents (Enclosure 3, 4, and 5).

Forty-nine years later, Maryland's schools start even earlier and many Maryland students of all ages already have bus pick-ups well before Civil Dawn under Standard Time. The average middle school start time is now 8:15 and the average high school start time is 7:56 a.m. Both levels have schools that start between 7:00 a.m. and 9:30 a.m. Most elementary schools start later in the morning, but there are elementary schools that start as early as 7:30 a.m. and as late as 9:30 a.m.⁷ I took the liberty of comparing winter sunrise to school start times across Maryland. You can see the chart in Enclosure 6, nearly all middle and high schools, plus a fair number of elementary schools would start before sunrise under permanent DST. It is not just the school bell time we ought to consider, but the fact that so many more Maryland students will be picked up by a bus or walk to school in the dark during the winter. This is a safety issue.

⁵ https://www.mabe.org/wp-content/uploads/2022/03/SB-534.Daylight-Savings-Time.pdf

⁶ https://mgaleg.maryland.gov/cmte_testimony/2022/hgo/1fkTcfacyrKCMm_luo2smEWOk1DgbLBwh.pdf

⁷ <u>https://www.startschoollater.net/md---statewide.html</u> see multiple graphics with list of all middle and high school start times and bell times relative to Orange Ribbon criteria.

When Massachusetts studied the permanent DST issue in 2017, their report made two caveats to the implementation of what they called Atlantic Time; community education and later school start times. As the Massachusetts report acknowledges "One way to avoid the downsides of year-round DST for school-aged children would be to delay school start-times until after there is sufficient daylight for safe travel." Many Maryland students ride buses for an hour, coupled with having to be at the bus stop 10 minutes early and arriving 15-30 minutes before the bell. We must take into account the impact of permanent DST on their safety during their dark commute before their pre-sunrise school start time.

Just as the list of groups that support age-appropriate start times continues to grow, so does the list of groups opposed to permanent DST. They include the American Academy of Sleep Medicine, National Safety Council, American Medical Association, and the National PTA which "... is opposed to daylight saving time during the winter months because of the safety factor." ⁹ 10 11

Please vote for an Unfavorable Report on SB-268, amend the bill to Permanent Standard Time, or amend the bill to include a mandate for a minimum safe, healthy, and age-appropriate start time for <u>all</u> schools.

Thank you,

Lisa E Van Buskirk

Lisa VanBuskirk, P.E., Chapter Leader, Start School Later Maryland | Start School Later Anne Arundel County sslaaco@gmail.com

Enclosure (1) - The Baltimore Sun, January 29, 1974

Enclosure (2) - The Baltimore Sun, October 29, 1981

Enclosure (3) - The Baltimore Sun, January 5, 1974

Enclosure (4) - The Baltimore Sun, January 8, 1974

Enclosure (5) - The Baltimore Sun, January 8, 1974

Enclosure (6) – Permanent Daylight Saving Time vs Maryland Public School Start Times

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⁸ https://www.ctnewsjunkie.com/upload/2017/11/Special Commission Commonwealths Time Zone.pdf

⁹ https://www.washingtonpost.com/lifestyle/wellness/sleep-daylight-saving-time-end/2020/08/28/213d3a0c-e8b8-11ea-bc79-834454439a44 story.html

¹⁰ https://www.washingtonpost.com/science/2019/03/08/springing-forward-daylight-saving-time-is-obsolete-confusing-unhealthy-critics-say/

¹¹ https://www.ama-assn.org/press-center/press-releases/ama-calls-permanent-standard-time

Enclosure (1)

The Baltimore Sun, January 29, 1974

A mere three weeks after permanent Daylight Saving Time began, "...the small savings in energy that we will make do not justify the loss of lives of our children, nor the hardship placed upon our children and their parents...the lives of our children should receive first consideration."

Bids to kill daylight

By ALBERT SEHLSTEDT, JR.

Washington Bureau of The Sun

Washington-There were serious moves in Congress yesterday to repeal year-around daylight saving time, which went into effect only three weeks ago as an energy-saving measure.

Congressmen in both houses expressed concern over schoolchildren who have been endangered on roads and highways during the dark morning hours of winter.

In Florida, a special session of the state legislature was scheduled for today so that clocks could be turned back an schoolchildren Eight have been killed in pre-dawn accidents there.

"The inescapable conclusion to be reached is that darkness had a great deal to do with the pre-dawn deaths," said Gov. Reubin Askew, who called the See DAYLIGHT, A4, Col. 1

Children's deaths spur bid to repeal daylight saving

one-day session solely to deal per (D., Fla.), who, along with with the daylight saving time most of the Florida delegation,

cember 14, and cited the Flor- their parents. ida deaths, plus a reported increase in sexual assaults on youngsters in Minnesota and that would be saved in the problems in other states.

Iowa), sponsor of one of the lives of our children should bills to repeal the daylight receive first consideration.' measure, said it was the No. 1 Forecasts of energy savings issue he confronted when trav- with daylight time appear to eling in his home state during have been exaggerated, acthe Christmas recess.

nize we may well have made a subject yesterday that the Fedmistake," Senator Clark told eral Power Commission has his colleagues.

8 bills in House

Kan.), also sponsoring a re- of from 1 to 3 per cent had pealer, said the daylight bill been hoped for. passed in December had little If Congress does, indeed, in-depth study.

Mike Mansfield (D., Mont.), for the winter months, much of said he was appalled by the the problem that the new law Florida deaths and urged the created is already behind the Senate Commerce Committee nation. to give repeal legislation its. The sun is rising earlier immediate consideration.

Capitol, there are eight bills morning before the repealers before the Commerce Commit- are approved by the appropritee calling for the repeal of ate congressional committees All have been introduced since given adequate advance warncongressmen returned from ing to change their schedules, their home districts to Wash- and the legislation is finally ington January 21.

DAYLIGHT, from Al | Representative Claude Pepis supporting repeal, said last In the United States Senate, week that "the small savings Marlow W. Cook (R., Ky.) rose in energy that we will make do in support of repealing the not justify the loss of lives of year-round daylight saving our children nor the hardship plan, cleared by Congress De- placed upon our children and

"I regret for others their loss of benefit from energy country and from extra time Senator Dick Clark (D., at the end of the day, but the

cording to Senator Clark. He "I think it's time we recog- said in a floor speech on the estimated that only two-tenths of 1 per cent of this month's fuel savings could be attrib-Senator Robert Dole (R., uted to daylight time. Savings

conclude that it made a mis-The majority leader, Senator take in enacting daylight time

each day and light could be On the House side of the over most of the country in the winter daylight saving time. and transportation agencies are enacted into law.

The Baltimore Sun, October 29, 1981.

Two months were added to Daylight Saving Time. Regarding the 1974 permanent DST, "Mr. Ottinger acknowledged there was an increase in child fatalities during the winter months through February..."

More daylight time voted

Washington (AP)—The House voted yesterday to extend daylight saving time from six to eight months a year over objections that the time change would jeopardize the safety of tens of thousands of school children.

The 243-165 vote came as supporters said the change, adding March and April to the daylight saving time months, would save energy because there would be more daylight during the time people are awake and need it.

Critics, especially rural congressmen, challenged that, saying more, not less, energy would be used. That plus the fear that school children would be forced to go to school in the dark could force many rural states to drop daylight saving time altogether, they argued.

The action by the House, which still must be approved by the Senate, reverses a decision the House made in 1976 when it rejected a similar proposal.

Under the plan, daylight saving time would be initiated on the first weekend in March rather than the last weekend in

April. At that time clocks would be moved ahead one hour, yielding more daylight in the evening and less in the morning. Clocks would be turned back an hour on the last weekend of October, the same time they are adjusted under the current law.

Representative Richard L. Ottinger (D, N.Y.), who sponsored the bill, said government studies of the 1974-1975 period, when the United States had year-round daylight saving time, showed energy savings of 100,000 barrels of oil a day in March and April and no increase in child fatalities.

Mr. Ottinger acknowledged that there was an increase in child fatalities during the winter months through February, but not in March or April.

The House plan would retain provisions for any state entirely within one time zone to opt out of the entire daylight saving system, as Arizona has. But the House rejected a proposal that would have let any state avoid going onto daylight saving time for only the two additional spring months.

Enclosure (3)

The Baltimore Sun, January 5, 1974

Anne Arundel County Public Schools delays all opening and closing times of schools 30 minutes to recoup savings in electricity, as a result of the shift to permanent Daylight Saving Time.

"The AAA said millions of pedestrians will be on the streets in partial or total darkness during morning hours, including children on their way to school."

Daylight saving prompts rundel school shift

announced it will alter schedules significantly as the nation turns its clocks ahead an hour tomorrow in converting to Daylight Saving Time.

Anne Arundel officials said night. vesterday that all opening and closing times of schools, school offices and school-related activities would be reschuled one-half hour later than nor-time since World War II. mal, beginning Monday.

Schools in Baltimore city and county, and in Howard counties said Harford in any scheduled-times.

nation through October, 1975. children The White House has said school.

Only one county in the Balti- the switch could cut back the more metropolitan area has demand for heating and electricity by as much as 3 per cent-particularly in the northern regions of the country-because people will not need to turn on their lights as early at

> The change over at 2 A.M. tomorrow will mark the first time the nation has gone on vear-round Daylight Saving

The switch to daylight time could create some problems for drivers, the American Automobile Association said. The there were no changes planned AAA said millions of pedestrians will be on the streets in par-Daylight time will remain in tial or total darkness during effect -throughout most of the the morning hours, including their way to

Enclosure (4)

The Baltimore Sun January 8, 1974

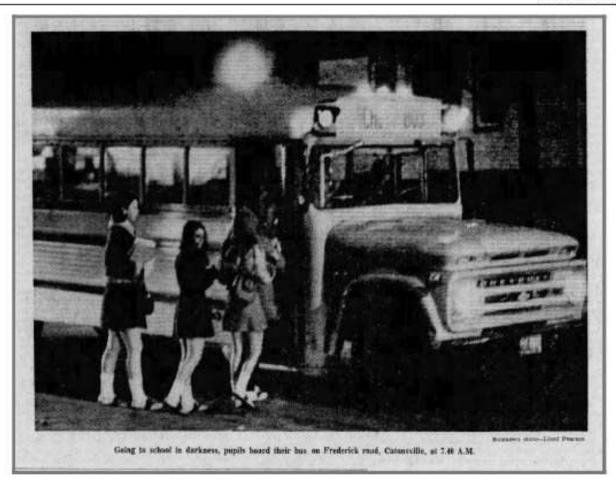
Cover Photo

"Going to school in darkness, pupils board their bus on Frederick Road, Catonsville. 7:40 A.M."



The Baltimore Sun (Baltimore, Maryland) · 8 Jan 1974, Tue · Page 1

Downloaded on Feb 17, 2021



Enclosure (5)

The Baltimore Sun January 8, 1974

"No injuries were reported in the Baltimore area, although county police advised school authorities that there had been some "close shaves" at school crossings."

"...most calls came from parents of high school and junior high school girls...Dundalk Senior High and Delaney Senior High, for example begin classes at 8 A.M. and 8:05 A.M. about a half hour before sunrise at 8:30 A.M." *These two high schools now start at 7:45 a.m.

> The Baltimore Sun (Baltimore, Maryland) · 8 Jan 1974, Tue · Page 1 Downloaded on Feb 17, 2021

County schools to start later as protests swell

By MIKE BOWLER

school crossing guards, Baltimore county school officials yesterday delayed morning bus and class schedules one-half hour.

The new schedule, effective tomorrow morning through istration buses. Friday, February 15, was anafter officials said they rewho saw their children set out first day of year-round Daylight Saving Time.

more Archdiocese said yester- pre-school hours." day there were no plans to alter the schedules schools in the area.

day began a one-half hour See DAYLIGHT, A5, Col. 1

Flooded with calls from anx- later starting time. City school parents and harried officials, who checked with other urban districts on the East Coast, said they would stick with regular schedules. Almost all city schoolbus riders use Mass Transit Admin-

After receiving a call from a nounced yesterday afternoon Baltimore county motorist who said he had narrowly missed ceived hundreds of calls from hitting a group of students concerned and angry parents waiting for a bus before dawn yesterday, James A. Sensenfor school in darkness on the baugh, the state school superurged Maryland intendent. drivers to "drive with extreme A spokesman for the Balti-caution during the morning

In Maryland and across the of parochial nation, school switchboards were buzzing as the energy-Anne Arundel county yester- saving measure went into ef-

County schools to start later in wake of protests

ballions, from Al police department formally re-spected day of the winter and some shortest day of the winter.

authorities that there had been some "close shaves" at school crossings. A teen-aged girl in Seymour, Conn., was struck and killed by a car as she walked to school shortly after 7 A.M.

Crossing guards in Salt Lake City, where surrise was at 8.52 A.M., were issued flashights.

A Baltimore county school spokesman sald most calls came from the parents of high school and jamor high school girls. Bus routes in the county are designed so that high school students are picked up first, then elementary students, most of whom begin school at 9 A.M.

A.M. Dundals Senior High and Du-shead a full hour. lancy Senior High, for exam-ple, began classes at 8 A.M. their teen-agers had never had and 8.65 A.M., about a half-crouble in the darkness at the \$30 A.M.

Afternoon schedules in the county are not affected, mean-ing that students will get a half-hour "vacation" each day half-heur "vacation" each day until February 15. This course on top of five energy-saving and snow days that had been included in the schedule and will not be made up, said forbert Y. Dubel, deputy super-intended. intendent.

Mr. Dutiel said the aftermost schedule was not changed be-cause many bus drivers have other jobs that could be disby an extension of rupted school hours.

We made the change for

DAYLIGHT, from Al | two ressens," he said. "The shortest day of the winter.

No injuries were reported in the Baltimore area, although time and some close county police advised school staves. We also got an unbesting that there had been lievable reaction in terms of concerned phone's been ringing all day."

Schoolchildren, of course, were not the only ones affected by the time change. Adults had to leave for work in the dark and the traffic jam on the Jones Falls expressway curred on achedule-in the dawn's early light.

calls bered long, early morning walks to class in their own school days, scaffed at the delayed openings. "I caught the bus in the dark when I was growing up, and I didn't mind," said Robin Poling of Clarksburg. W.Va., were moved

before sunrise at about other end of the day. "I know I could never keep mine home at night," said Mr. Dubel.





Permanent Daylight Saving Time vs Public School Hours in Maryland*

Under permanent Daylight Saving Time, the latest winter sunrise in Maryland, would be between 8:25-8:35 a.m., depending on location.

Civil Dawn is the approximately 30 minutes before sunrise, when it is possible to see without artificial illumination.

How much earlier before sunrise or civil dawn, are students waiting for buses or walking to school?

RED = School starts before winter sunrise. GREEN = Start times after winter sunrise.

| County/School District | HS start time or start ranges | MS start time or start ranges | ES start time or start ranges |
|---------------------------|----------------------------------|----------------------------------|----------------------------------|
| Allegany County | 7:40 | 7:40 | 8:00 to 8:45 |
| Anne Arundel County | 8:30 | 9:15 | 8:00 to 8:30 |
| Baltimore City | 7:30 to 9:00 | 7:30 to 9:15 | 7:30 to 9:15 |
| Baltimore County | 7:10 to 7:45 | 7:40 to 8:30 | 8:35 to 9:20 |
| Calvert County | 7:25 to 7:40 | 7:22 to 8:25 | 8:30 |
| Caroline County | 7:50 | 7:40 | 9:00 |
| Carroll County | 7:30 | 8:25 to 8:35 | 7:45 to 9:30 |
| Cecil County | 7:40 | 7:50-8:10 | 9:00 |
| Charles County | 7:25 to 8:05 | 7:45 to 8:50 | 8:30 to 9:30 |
| Dorchester County | 7:50 to 8:15 | 7:55 to 8:05 | 8:30 to 9:00 |
| Frederick County | 7:30 | 8:00 | 8:20 to 9:00 |
| Garrett County | 8:25 | 8:30 | 8:15 to 8:40 |
| Harford County | 7:30 | 8:15 | 9 to 9:30 |
| Howard County | 7:25 | 7:40 to 8:25 | 8:15 to 9:25 |
| Kent County | 7:45 | 8:40 | 8:00 to 9:00 |
| Montgomery County | 7:45 | 7:55 to 8:15 | 9:00 to 9:25 |
| Prince George's County | 7:45 to 9:30 | 7:45 to 9:30 | 7:45 to 9:15 |
| Queen Anne's County | 7:35 | 7:45 | 7:30 to 8:55 |
| Somerset County | 7:30 | 7:20 | 8:00 |
| St Mary's County | 8:00 | 7:05 to 7:55 | 8:25 to 9:00 |
| Talbot County | 7:45 to 7:50 | 7:45 to 7:50 | 8:40 |
| Washington County | 8:45 | 7:20 to 8:45 | 7:30 to 9:15 |
| Wicomico County | 7:45 | 7:45 to 9:15 | 8:15 to 9:15 |
| Worcester County | 7:48 to 8:07 | 7:30 to 8:00 | 7:45 to 8:30 |

^{*} based on 2022-2023 school start time data collected by SSL Maryland

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00_letter_sb268.pdfUploaded by: Michael Garrahan
Position: UNF

Dear Senators:

I am a musician who lives in Virginia and sometimes plays in Maryland. While most of us would like to stop changing clocks, there is a right way and a wrong way to do it. Standard time is better for our health and safety than year-round daylight saving time (DST) would be. Therefore I oppose SB 268 unless it is amended for standard time.

In order to clarify this inherently confusing issue, I also submit one fact sheet I wrote as a volunteer with the nonprofit Save Standard Time, and another from the American Academy of Sleep Medicine.

Before we started changing clocks, the time of day was not subject to debate; midday was 12 o'clock. AM and PM originally refer to solar noon, midway between sunrise and sunset, when the Sun is highest. In renaming that moment 1 o'clock, DST disregards centuries of tradition.

Sleep medicine professionals and chronobiologists find not only that seasonal clock changes are disruptive, but also that DST imposes a chronic circadian misalignment. In short, morning light helps us wake up and evening darkness helps us go to sleep, but DST puts both of those an hour later on the clock. This tends to reduce the length and quality of sleep and increase the likelihood of other mental and physical health problems.

The United States tried year-round DST in 1974 to mitigate an energy crisis. Some members of this committee may remember going to school on those dark winter mornings; others may have seen photos. The public found it unsafe and demanded that the experiment be cut short. We need not repeat that mistake to learn from it. If some students today go to school before sunrise for part of the year, let's not make it worse. If school should start later, let's not counteract that.

Although a few businesses may benefit from DST, public health and safety should be given priority. I ask that the Education, Energy, and Environment Committee either amend SB 268 for standard time or lay it on the table.

Respectfully, Michael Garrahan

01_guide_md.pdfUploaded by: Michael Garrahan
Position: UNF



A Guide to Timekeeping for Maryland Legislators

March 2023



Save Standard Time opposes SB 268 because the evidence shows that year-round daylight saving time would be detrimental to the health, safety, and well-being of Marylanders. The best way to end clock changes is year-round *standard* time. For details see <u>savestandardtime.com/concerns</u>.

Eastern Standard Time (EST) is the mean solar time of 75°W longitude, 5 hours behind Coordinated Universal Time (UTC). It was adopted by the railroad industry in 1883 and codified in the Standard Time Act of 1918. The US keeps standard time nationwide from early November to mid March.

Eastern Daylight Time (EDT) is one hour ahead of EST and 4 hours behind UTC. Daylight saving time (DST) was first used in 1918 as as a wartime measure. Before the Uniform Time Act of 1966, some cities observed DST while many rural areas did not. Most of the US observes DST from mid March to early November.

Nature gives Maryland 14 hours or more daylight in summer and 10 hours or less daylight in winter regardless of clock setting. Standard time puts nearly equal shares in AM and PM; DST shifts an hour from AM to PM.

Doctors say that aside from the disruptive clock changes, DST produces a chronic circadian misalignment which degrades sleep and increases the risk of various health problems. The American Academy of Sleep Medicine (AASM) opposes year-round DST; others concurring with AASM include the Maryland Sleep Society, the American College of Chest Physicians, the American Academy of Neurology, and the American Medical Association. For details see the AASM fact sheet.

Seasonal affective disorder is treated with bright light in the morning. DST shifts daylight away from the morning.

Darker winter mornings were problematic in 1974, when the US tried year-round DST in response to an energy crisis. Members of Congress received numerous complaints about safety, including a letter from the governor of Florida about increased fatalities there. The House voted 383-16, and the Senate agreed, to revert to standard time as usual that October.

Claims of saving energy today should be viewed with skepticism, as efficient lighting and widespread air conditioning have changed the situation. When Indiana began observing DST in 2006, total energy usage there increased slightly.

Under US law, states may either observe DST seasonally on the national schedule or keep standard time year round (15 USC §260a). Arizona, Hawaii, and US territories exercise the latter option. Year-round DST would require a change in US law.

The Sunshine Protection Act expired with no House action in the previous Congress and was recently reintroduced. It would impose year-round DST on states which have not already chosen year-round standard time.

If SB 268 passes but Congress does not act, Marylanders may wonder why they still change clocks. If Congress does act, winter sunrises and sunsets would both occur an hour later on the clock than usual, and complaints about darker mornings as in 1974 are likely.

Other opponents of year-round DST include the National Safety Council, the National PTA, Start School Later, the Maryland Association of Boards of Education, the Rabbinical Council of America, and Agudath Israel of Maryland; see also <u>savestandardtime.com/endorsements</u>.

02_aasm_sheet.pdfUploaded by: Michael Garrahan Position: UNF



End the Switch and Support PERMANENT STANDARD TIME

Every year, we make the switch between standard time and daylight saving time (DST) when we "fall back" to standard time in November and "spring forward" to DST in March. This annual switch is quite simply not good for our health. Data clearly shows that the abrupt change from standard time to DST in March is associated with significant public health and safety risks, including increased risk of adverse cardiovascular events, mood disorders, and motor vehicle crashes.

It's critical that we enact legislation to get rid of the switch between standard time and DST. However, permanent DST is not the answer. Instead, we should move to permanent standard time. Current evidence supports the adoption of year-round standard time, which aligns best with human circadian biology and provides distinct benefits for public health and safety. This position is shared by more than 20 medical, scientific, and civic organizations, including the American Academy of Sleep Medicine, American Academy of Neurology, American College of Chest Physicians, American College of Occupational and Environmental Medicine, National PTA, National Safety Council, Society for Research on Biological Rhythms, and World Sleep Society.

DST has been shown to lead to chronic sleep deprivation amongst adults and adolescents. Research has found that adolescents get less sleep and had longer reaction times, increased lapses in vigilance, and increased daytime sleepiness following the switch to DST. These effects are especially pronounced in children with autism who are especially susceptible to chronic sleep issues. Permanent standard time is the best option for health.

DST also leads to circadian misalignment - a mismatch in the timing between our biological clocks and our work, school, and sleep routines. This misalignment happens

when we are waking up in the dark to go to work or school or getting late evening light that can adversely affect the body's ability to fall asleep by suppressing melatonin. Circadian misalignment has been correlated with detrimental health effects, including cancer, cardiovascular disease, Type 2 diabetes, and neurodegenerative disease.

Congress previously enacted legislation to make DST permanent and repealed it less than a year later. During the 1974 energy crisis, permanent DST was thought to save energy by decreasing the need for electric lighting in the evening. However, energy savings from DST appear negligible, as air conditioning needs often increase in the late afternoon in the summer and heating needs often increase in the morning in the winter. In addition, the dark mornings were very unpopular, with sunrise arriving in DC and New York around 8:30am and not until around 9am in Detroit and Indianapolis. Moreover, a number of children were fatally struck by cars as they made their way to school in the dark. Permanent DST was repealed by Congress less than a year after its implementation. The House vote to end permanent DST was 383-16 and the Senate agreed in a voice vote.

AASM supports elimination of seasonal time changes in favor of a fixed, national, year-round standard time, which aligns best with human circadian biology and provides distinct benefits for public health and safety. For additional information contact Eric Albrecht at ealbrecht@aasm.org or AASM Washington Representatives Amy Kelbick at akelbick@mcdermottplus.com.

SB0268-EstEastDAYLIGHTTZ.pdf Uploaded by: Nelda Fink Position: UNF

Unfavorable - SB0268 Full Year Daylight Savings time

Nelda Fink MD District 32

An engineer who was a whole lot smarter then present day legislators, studied the longitudes and rotation of the earth developing the 24 time zones that exist today. See <u>GeoJango Maps</u>. This is based on the premise that the earth is round and that it rotates. And that the 24 time zones would allow the proper amount of light for all nations on the earth. This all started in 1848, and with the coalition of other smart engineers developing a conference, the current time zones were established.

If you as a legislator believe the earth is round then you would have no problem establishing a year round time zone as **was developed by those engineers**. If however you believe the earth is flat and maybe that you can somehow control the sunlight beaming down on Maryland, then you might be enticed to propose a scheme that goes against what those engineers developed over 150 years ago.

I agree to <u>only returning to the year round time zone that was established</u> <u>by these engineers</u> (Eastern Standard Time based on the 75th meridian longitude) unless you can present some <u>scientific argument</u> against what was previously developed and accepted world wide.

Maryland as a state is a sovereign republic. We do not have to follow what the federal government (Dept of Transportation) has pushed on our state since 1918 originally for the purpose of providing more light for war purposes. In fact this act has never done what it was proposed to do because it was not based on scientific fact either; only based on the exercise of power over the states and you folks here in our sovereign republic of Maryland fell for it and continue to fall for it.

We as a state do not have to follow federally developed regulations and mandates that are not inter-state commerce related. That's what the Constitution of the US states.

So No! We do not make our own time zone, we do not include other states to make it work (HB0165). We restore the sovereignty that is inherent in our Republic and return to the time zone that was developed by engineers with science behind it and that was agreed upon before 1918.

I oppose this bill and urge the members of the committee to vote unfavorable.

Nelda Fink

Agudah Testimony - SB 268 DST - oppose.pdf Uploaded by: Rabbi Ariel Sadwin

Position: UNF



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Rabbi Ariel Sadwin
Executive Director

EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE

MARCH 7, 2023

SENATE BILL 268
GENERAL PROVISIONS - FULL-YEAR DAYLIGHT SAVINGS TIME

TESTIMONY OF AVI LENCZ,
ASSOCIATE DIRECTOR, AGUDATH ISRAEL OF MARYLAND

OPPOSE

Agudath Israel of Maryland speaks on behalf of the Orthodox Jewish communities across Maryland and on behalf of the 10,000 students attending 30 Jewish day schools in our great state.

Common concerns with switching to permanent Daylight Savings Time include very real concerns regarding the ramifications of such a change on children and young adults. Forcing children and young adults to wake up in the early morning to prepare for school impedes their sleep patterns and negatively impacts learning readiness and physical and emotional health. Early school commutes before daylight would increase the likelihood of accidents, as well as force students to freeze during the winter as they wait for the school bus or as they walk to school. Indeed, the scientific consensus of organizations such as the American Medical Association and the American Academy of Sleep Medicine is to oppose eliminating Standard Time.

But beyond school-related concerns, we would like to emphasize the deleterious impact this bill would have on the Orthodox Jewish communities of Maryland because of the requirements of our faith. Our morning services, rituals, and prayers, required of all adults of our faith, are time-based. For instance, the Shema prayer, a statement and affirmation of our acceptance of G-d and His Kingship that serves as one of the centerpieces of the morning service, must be recited after dawn but before mid-morning. The Amidah prayer, a selection of blessings and supplications first recited by each individual and then repeated aloud by the prayer leader, is to be said after sunrise.

If Daylight Savings Time was to be instituted year-round, services in the winter months would not be able to start before 8, or even 8:30, in the morning. As the services take between forty minutes to an hour, this would place a severe burden on members of our faith, forcing them to make the horrible choice between observance of the morning services and coming to work on time. Employers would look for any excuse to avoid hiring members of our community. Faced with shrinking opportunities, people would be forced to sacrifice their livelihoods, be false to their beliefs, or relocate.

While in principle we do not oppose "locking the clock" and eliminating seasonal time adjustments by adopting Standard Time year-round, the adoption of Daylight Savings Time year-round would create a very difficult environment for many Marylanders. We ask you to help our state maintain its well-deserved reputation for hospitality to members of all faiths and beliefs, and report unfavorably on Senate Bill 268.



Rabbi Heber DST Bill 2023-.pdf Uploaded by: Rabbi Dovid Heber Position: UNF

RABBI DOVID HEBER

RABBI

KHAL AHAVAS YISROEL TZEMACH TZEDEK

KASHRUS ADMINISTRATOR

STAR-K KOSHER CERTIFICATION

AUTHOR

THE INTRIGUING WORLD OF JEWISH TIME

SEFER SHAAREI ZMANIM (GATES OF TIME)

EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE

March 7, 2023

SENATE BILL 268 GENERAL PROVISIONS - FULL-YEAR DAYLIGHT SAVINGS TIME

TESTIMONY OF RABBI DOVID HEBER

OPPOSE

In light of the pending legislation, I wanted to convey how devastating year-round Daylight Saving Time (DST) would be for the Orthodox Jewish community.

Introduction: Jews worldwide conduct prayer services three times each day, 365 days a year, and on some days there are additional prayers as well. The longest service of the day is the morning prayer service, during which time the prayer shawl and phylacteries are donned. Ideally, prayer services take place in the synagogue with other congregants who form a minyan/quorum. Breakfast is not eaten until after services.

Time of Morning Prayer Service on weekdays: The service in the synagogue takes approximately 40-50 minutes. Exact times vary slightly from one synagogue to another. Morning services ideally take place around sunrise (or later) and may not be prayed before dawn.

With year-round DST, note the following times for some major Jewish metropolitan areas in Maryland in December and January:

| <u>City</u> <u>Dawr</u> | n/Earliest Start Time | Prayers End | <u>Sunrise</u> |
|-------------------------|-----------------------|--------------------|----------------|
| Baltimore (EDT) | 7:14 a.m. | 7:55-8:05 a.m. | 8:26 a.m |
| Silver Spring (EDT) | 7:15 a.m. | 7:55-8:05 a.m. | 8:27 a.m. |

The problem is quite obvious. With services not able to take place until such late times and ending as late as 8:05 a.m., those leaving to begin their commute to work would encounter serious work schedule disruptions. How can individuals during the winter pray before going to work? Earlier work schedules would make it impossible to pray.

Furthermore, school schedules would be greatly disrupted as classes could not begin on time due to such late services.

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Finally, there should be concern for children who need to commute to school. Many children start school at 8:00 a.m. or 8:30 a.m. They would need to leave when it is still very dark. In the cities listed above, school start-times would occur 30 minutes before sunrise. The gain of not having to change the time twice a year is greatly offset by the very dark morning commute.

I urge the members of the committee to oppose SB 268.