

SAVE STANDARD TIME

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

2023 May 17

Committee on State and Local Government Maine Legislature Augusta, Maine

Re: Yes on LD 983 – Permanent Standard Time is best for health, safety, and prosperity.

Dear Honorable Committee Members,

Please support LD 983, exemption from Daylight Saving Time (DST, false time) and restoration of permanent Eastern Standard Time (EST, natural time). Permanent EST is federally approved, and it's best for health, safety, education, economy, and civil liberties of schoolchildren, essential workers, and commuters.

Scores of organizations—representing millions of researchers, physicians, teachers, parents, journalists, and community leaders—oppose DST and endorse permanent Standard Time. Among these are the 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, Sun Sentinel*, writers from Cato, *Daily Wire, Breaking Points*, and many more.^{[AASM][AMA][CSS][SRBR]}

Permanent EST at Maine's longitude is **federally approved** by the Uniform Time Act (15 USC §260a); it **can end clock change quickly**, as most voters wish. It would also **keep sunrise before 8am**, (when most school/work begins)^{[CDC][Silver]} for health, safety, and prosperity. Permanent Standard Time has been observed **for decades** in **Arizona**, **Hawaii**, all five US territories, and most nations. Most of **Mexico** restored permanent Standard Time last year, and more states have permanent Standard Time bills than ever before. Permanent EST would protect start times for **schoolchildren** and **essential workers** (farmers, police, firefighters, commercial drivers, transit operators, healthcare personnel, teachers) by letting most **sleep naturally** past dawn year-round.^{[Borisenkov][Cell][Schlanger][Skeldon]} Its benefits to circadian health would 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]} Standard Time is the natural clock, set to the sun.

Other bills have considered permanent DST (also known as Atlantic Standard Time at Maine's longitude), but that is prohibited by the Uniform Time Act; it cannot end clock change quickly. It would also delay sunrise in Portland past 8am nearly all of December and January, as late as 8:14am (it would delay sunrise later and longer in places further

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north). It increased deaths and injuries, especially 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. Americans rejected permanent DST in 1974, and it has failed in several other years and places. [BBC][Congress][Ripley][Yorkshire] It would deprive morning light needed by farmers, construction workers, and other outdoor laborers. [Schlanger] It 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 increase need for morning heat and evening air conditioning in homes.^[Kotchen] 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]

Please hear the nonpartisan consensus of history and science. Save time, money, and lives. Please support LD 983, exempt Maine from DST, and restore permanent EST.

Sincerely,

Jav Pea President jay@savestandardtime.com

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Yes on LD 983

End Daylight Saving Time Now—with Permanent Eastern Standard Time

"Permanent Standard Time is best aligned with human circadian biology

and has the potential to produce beneficial effects for public health and safety."

American Academy of Sleep Medicine

Representing 11,000 accredited member sleep centers and individual members, including physicians, scientists, and other health care professionals. https://jcsm.aasm.org/doi/10.5664/jcsm.8780

SAVE STANDARD TIME

"The optimal choice is permanent Standard Time...

"Having body clocks in tune with the sun aligns just about every aspect of physiology and behavior."

> Joseph Takahashi PhD Howard Hughes Medical Institute, Maryland Erik Herzog PhD

Washington University, Missouri https://www.medpagetoday.com/opinion/second-opinions/97902

SAVE STANDARD TIME

"The best time to prevent obesity and diabetes, make hearts healthier, and sleep better, is to be more aligned with the sun, which is Standard Time."

Karin Johnson MD Neurology Professor, Baystate Medical Center, Massachusetts https://lifeapps.io/sleep/springing-forward-affects-your-sleep-heres-how-to-cope/

SAVE STANDARD TIME

"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

"An extra hour of light in the evening reduces sleep duration by an average of 19 minutes...

"Discontinuity in the timing of natural light has significant effects on health outcomes typically associated with circadian rhythms disruptions (eg obesity, diabetes, cardiovascular diseases, and breast cancer) and economic performance (per capita income)."

Osea Giuntella PhD, University of Pittsburgh Fabrizio Mazzonna PhD, University of Southern Indiana

https://www.sciencedirect.com/science/article/abs/pii/S0167629618309718

SAVE STANDARD TIME

"People sleep less during Daylight Saving Time

because they are exposed to more light at later hours, which pushes circadian clocks later. When the alarm rings, we wake earlier than our circadian clocks, cutting sleep short. Insufficient sleep is a nationwide problem linked to diabetes, mood disorders, errors, accidents, and impaired learning."

Charles Czeisler MD PhD & Elizabeth Klerman MD PhD Harvard Medical School, Massachusetts

https://www.bostonglobe.com/2023/03/13/opinion/making-daylight-saving-time-permanent-would-mean-losing-sleep-lives/

SAVE STANDARD TIME

"Daylight Saving Time is anti-family...

"Dark mornings caused by DST endanger millions of children forced to wait for the school bus before sunrise... DST's dark mornings and bright evenings make it harder for parents to get their kids up for school or to bed at night decreasing children's sleep quality and increasing family strife."

Scott Lincicome, Economics Director, Cato Institute

https://thedispatch.com/newsletter/capitolism/enddst/

SAVE STANDARD TIME

"Daylight Saving Time increases residential electricity demand.

Estimates of the overall increase are approximately 1%, but the effect is not constant. DST causes the greatest increase in electricity consumption in late summer and early fall, when estimates range 2%–4%... The policy costs Indiana households an average of \$8.6M/year in increased electricity bills. We also estimate social costs of increased pollution emissions to be \$1.6–\$5.3M/year."

Matthew Kotchen PhD, Yale University Laura Grant PhD, Claremont McKenna College

https://cepr.org/voxeu/columns/does-daylight-saving-time-save-electricity

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	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 light 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 dawn in autumn, winter, and spring. Dark mornings make waking harder. Light at night makes sleep harder.	Lets most people sleep naturally past dawn 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 & Other Essential Workers	Shortens morning light needed for outdoor labor and all-day alertness.	Preserves morning light needed for outdoor labor and all-day alertness.
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 expense, 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.
Federal Law	Prohibited by the Uniform Time Act (15 USC §260a).	Approved for states by the Uniform Time Act (15 USC §260a).
Lasting Public Support	Repeatedly tried and reverted after winter is experienced in the US and other nations.	Observed in Arizona, Hawaii, all five US territories, and most nations for many decades.



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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

Alabama Board of Med Examiners/Licensure Commission American Academy of Cardiovascular Sleep American Academy of Dental Sleep Medicine American Academy of Sleep Medicine American College of Chest Physicians California Sleep Society Canadian Society for Chronobiology Dakota Sleep Society Indiana State Medical Association Massachusetts Medical Society **Missouri Sleep Society** Northwest Nogain 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**

Safety & Labor

American College of Occupation & Environment **B-Society** Good Light Group Solaris Fatigue Management

News Editorial Boards

Bloomberg Opinion Minneapolis Star Tribune South Florida Sun Sentinel

Reliaious Riahts

Adath Israel San Francisco Agudath Israel of California Agudath Israel of Florida California Islamic University Rabbinical Council of California American Academy of Neurology American Association of Public Health Physicians American Medical Association Canadian Sleep Society Capitol Neurology Hampden District Medical Society Kentucky 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

Colorado PTA League of Women Voters of Delaware County National PTA Start School Later

Association of Canadian Ergonomists Daylight Academy National Safety Council USA Weather, Dallas–Fort Worth, Texas

The Daytona Beach News-Journal The Oregonian

Agudath Israel of America Agudath Israel of Chicago Agudath Israel of Maryland Rabbinical Council of America

Doctors

Raúl Aguilar-Roblero MD PhD, Mexico Shimon Amir PhD, Montreal, Quebec Michael Antle PhD, Calgary, Alberta Mariah Baughn MD, San Diego, California Joseph Boyd PhD, Temecula, California Hugo Calligaro PhD, San Diego, California Jonathan Charest PhD, Calgary, Alberta Joanna C Chiu PhD, Davis, California Steven M Croft MD FAAN, Houston, Texas Joseph De Konick PhD, Ottawa, Ontario Grant Denn PhD, Colorado Mona Ezzat MD, San Diego, California Susan S Golden PhD, San Diego, California John F Gottlieb MD, Chicago, Illinois Chelsea Gustafson PhD, Portland, Oregon Liz Harrison PhD, San Diego, California Myriam Juda PhD, Vancouver, British Columbia Elizabeth B Klerman MD PhD, Boston, Massachusetts Jack Kruse DMD MD, New Orleans, Louisiana Katia Lamia PhD, San Diego, California Andy LiWang PhD, Merced, California Beth Malow MD MS, Brentwood, Tennessee Peter Mansbach PhD, Bethesda, Maryland Melody T McCloud MD, Atlanta, Georgia Matt Metzgar PhD, Charlotte, North Carolina Thomas E Nordahl MD PhD, Davis, California Ketema Paul PhD, Los Angeles, California Frank Powell PhD, San Diego, California Dorothy D Sears PhD, San Diego, California Abhinav Singh MD MPH FAASM, Indiana Andrea Smit PhD, Vancouver, British Columbia Andrew Spector MD, Durham, North Carolina Melissa A St Hilaire PhD, Boston, Massachusetts Tessa Sugarbaker MD MFT, San Francisco, California Jennifer Thomas PhD, San Diego, California Roger Tseng PhD, Ames, Iowa Nathaniel F Watson MD MSc, Washington Daniel S Whittaker PhD, Los Angeles, California Amir Zarrinpar MD PhD, San Diego, California Ying Zhang PhD, Indianapolis, Indiana

Other Individuals

Lisa Alexia PA-C, Alaska Alexandra S Devin LCAT RDT, Beacon, New York Beverly Feldman RN MSN, Houston, Texas Betty C Jung MPH RN MCHES, Connecticut Aleta March RPSGT, Pilot Hill, California Peter Varfalvy MSc, Quebec Elizabeth Wellburn MA, Victoria, British Columbia Salman Ahsan PhD, San Jose, California Sonia Ancoli Israel PhD, San Diego, California Susanna Barry PsyD, Medford, Massachusetts William Bechtel PhD, San Diego, California Maja J Buj MD, New York, New York Oscar Castanon-Cervantes PhD, Atlanta, Georgia Archana G Chavan PhD, Merced, California Scott Cookson PhD, San Diego, California Richard E Cytowic MD, Washington, DC Jason DeBruyne PhD, Atlanta, Georgia Jaime K Devine PhD, Baltimore, Maryland Karen L Gamble PhD, Birmingham, Alabama Cathy Goldstein MD MS, Ann Arbor, Michigan Bill Griesar PhD, Portland, Oregon Stacey Harmer PhD, Davis, California Erik Herzog PhD, St Louis, Missouri Royan Kamyar MD, La Mesa, California Alison Kole MD MPH FCCP FAASM, New Jersey Michael T Lam MD PhD, San Diego, California Irving Lebovics DDS, Los Angeles, California Travis Longcore PhD, Los Angeles, California Emily Manoogian PhD, San Diego, California Michael McCarthy MD PhD, San Diego, California Girish Melkani MS PhD, San Diego, California Ralph Mistlberger PhD, Vancouver, British Columbia Marie Pariollaud PhD, La Jolla, California Linda Petzold PhD, Santa Barbara, California Kendall Satterfield PhD, San Diego, California Lori L Shemek PhD, Dallas–Fort Worth, Texas Benjamin Smarr PhD, San Diego, California Barbara Sorg PhD, Portland, Oregon Heather R Spence PhD, Arlington, Virginia Andrew Steele PhD, San Luis Obispo, California Joseph S Takahashi PhD, Dallas, Texas Gianluca Tosini PhD, Atlanta, Georgia Judy Village PhD CCCPE, British Columbia David K Welsh MD PhD, San Diego, California Chris Winter MD FAASM DABSM DABPN, Virginia Wen Zhang PhD, Indianapolis, Indiana Irving Zucker PhD, Berkeley, California

Matthew Anderson JD, Medford, Oregon Keith Eichner CWO, Western New York Janet Huff LPC, Shreveport, Louisiana Gayle Kahn Friedman LCSW, Studio City, California Angela Miller MA BSEd, Springfield, Missouri Jennifer Viau CNA, Washington Ellen Wermter NP DBSM, Virginia

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

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The Guardian

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

Pedro 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. <u>Mexico</u>'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 <u>contemplating an end to the annual</u> round of "spring forward, fall back".

One study, published by the National Autonomous University of <u>Mexico</u>, 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.



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 <u>media@ama-assn.org</u>



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. <u>Data clearly shows</u> 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, yearround 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 <u>ealbrecht@aasm.org</u> or AASM Washington Representatives Amy Kelbick at <u>akelbick@mcdermottplus.com</u>.

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 <u>does the reverse</u>. 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 <u>do the opposite</u>.

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 <u>solid plurality</u> 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 just three 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



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.

- For more information, please visit our website: http://www.srbr.org -

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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 "<u>Sunshine Protection Act (https://www.congress.gov/bill/117th-congress/senate-bill/623?</u>

<u>q=%7B%22search%22%3A%5B%22sunshine+protection+act%22%2C%22sunshine%22%2C%22protectio</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-</u> <u>releases?id=B7EE5AB2-E909-49B3-B0DF-4F1DC0AB49C6)</u>.

At the Minnesota Legislature, there are bills, S<u>F 149 (https://www.revisor.mn.gov/bills/bill.php?</u> <u>b=Senate&f=SF0149&ssn=0&y=2021&keyword_type=all&keyword=daylight)</u> and <u>HF 72</u> (<u>https://www.revisor.mn.gov/bills/bill.php?f=HF72&y=2021&ssn=0&b=house)</u>, calling for this as well. <u>Sen. Mary Kiffmeyer (https://www.senate.mn/members/member_bio.html?leg_id=15302)</u>, R-Big Lake, has long been a <u>champion (https://www.revisor.mn.gov/bills/bill.php?</u> <u>b=Senate&f=SF0149&ssn=0&y=2021&keyword_type=all&keyword=daylight)</u> 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.

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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 <u>8:50 a.m. (https://sunrise-sunset.org/us/minneapolis-mn/2022/1)</u>

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 (https://www.smithsonianmag.com/smart-news/what-happened-thelast-time-the-us-tried-to-make-daylight-saving-time-permanent-

<u>180979742/#:~:text=In%20October%201974%2C%20President%20Gerald,planned%20two%2Dyear%2(</u> the change.

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 (https://jcsm.aasm.org/doi/10.5664/jcsm.8780)</u> 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> (<u>https://med.umn.edu/bio/dom-a-z/conrad-iber</u>), 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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