



SAVE STANDARD TIME

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

2021 May 13

House State Affairs Committee
The Alaska State Legislature
Juneau, Alaska

Re: Oppose HB-31 (Amend to Permanent Standard Time)

Dear Honorable Committee Members,

Please oppose HB-31 until amended from permanent Daylight Saving Time to permanent Standard Time. Permanent DST has repeatedly failed before, with loss of lives and money. Only permanent Standard Time (defined naturally by the sun) can improve viral immunity with better sleep, protect schoolchildren and workers with morning sunlight, achieve sustainable public approval, and be enacted without congressional action.

Scores of organizations representing thousands of scientists/doctors and millions of teachers/parents oppose permanent DST and endorse permanent Standard Time. Among these are the National PTA, National Safety Council, American Academy of Sleep Medicine, American College of Chest Physicians, National Sleep Foundation, American College of Occupational & Environmental Medicine, Start School Later, Society for Research on Biological Rhythms, Association of Canadian Ergonomists, and Canadian Society for Chronobiology (example expert statements enclosed).^{[AASM][CSC][NSF][SRBR]}

Permanent Standard Time is the quickest way to end clock changes, as the Uniform Time Act pre-approves any state's self-declared exemption from DST and restoration of permanent Standard Time. Recent scientific polling shows strong public support to end clock changes, with preference for permanent Standard Time.^[AP] History shows support for permanent DST reverses into strong opposition once its forced early waking in dark, cold winter mornings is experienced. Permanent DST has failed several times worldwide; it was a deadly disaster in the US in 1974.^{[BBC][Ripley][Yorkshire]}

Most work and school days start at 8am^{[CDC][Silver]}. Permanent DST would delay sunrise in Anchorage to 11:15am and past 8am for 5.7 months, in Juneau to 9:46am and past 8am for 4.1 months, and in Fairbanks to 11:59am and past 8am for 5.5 months (comparison photos enclosed). Its shorter, darker mornings would undo the benefits of starting school later and disrupt work schedules.^{[Borisenkov][Cell][Schlanger][Skeldon]} Permanent Standard Time instead preserves morning sunlight, when health, safety, and productivity need it most.^{[AASM][CSC][Juda][Roenneberg][SRBR]}

Sleep is essential to viral immunity (including COVID),^{[Meira][Panda][Ray]} and for years the CDC has classified sleep deprivation as a nationwide epidemic.^[Lin] Springing clocks forward to DST acutely deprives sleep. Leaving clocks forward on DST chronically deprives sleep (estimated

average 19 minutes nightly).^{[CSC][Giuntella][Roenneberg]} Artificial delay of sunrise by one hour each day (such as by DST) manifests as statistically significant increases in accidents, disease (certain cancers up 12–36%), and healthcare costs, and as statistically significant decreases in learning, productivity, and earnings (individual wages down 3–5%).^{[CSC][Gibson][Giuntella][Gu][Juda][Roenneberg]} It is not just clock change that harms, but also DST's forced early waking. Permanent Standard Time lets us sleep.^{[ASM][SRBR]}

Please listen to the consensus of scientists, doctors, teachers, polling, and history. Save money and lives. Reject permanent DST, and restore permanent Standard Time instead.

Sincerely,



Jay Pea
Founder & President
jay@savestandardtime.com

American Academy of Sleep Medicine (2020). "Call for Elimination of Daylight Saving Time". *Journal of Clinical Sleep Medicine*. <https://aasm.org/american-academy-of-sleep-medicine-calls-for-elimination-of-daylight-saving-time/>

AP-NORC (2019). "DST vs Standard Time". *Center for Public Affairs Research*. <https://gpnorc.org/projects/daylight-saving-time-vs-standard-time/>

BBC (2014). "Russia: Putin Abolishes 'Daylight Savings' Time Change". *BBC News*. <https://www.bbc.com/news/blogs-news-from-elsewhere-28423647>

Borisenkov et al (2016). "Seven-Year Survey of Sleep Timing in Russian Children and Adolescents". *Biological Rhythm Research*. https://www.researchgate.net/publication/307547013_Seven-year_survey_of_sleep_timing_in_Russian_children_and_adolescents_chronic_1-h_forward_transition_of_social_clock_is_associated_with_increased_social_jetlag_and_winter_pattern_of_mood_seasonality

Canadian Society for Chronobiology (2019). "Turn Back the Clock on Daylight Savings: Why Standard Time All Year Round Is the Healthy Choice". *The Globe and Mail*. <https://www.theglobeandmail.com/opinion/article-turn-back-the-clock-on-daylight-savings-why-standard-time-all-year/>

Cell Press (2019). "Permanent Daylight Savings May Cancel Out Changes to School Start Times". *EurekaAlert!*. https://www.eurekaalert.org/pub_releases/2019-04/cp-pds041819.php

Centers for Disease Control and Prevention (2015). "School Start Times for Middle School and High School Students – United States, 2011–12 School Year". *Morbidity and Mortality Weekly Report*. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a1.htm>

Gibson & Shrader (2015). "Time Use and Productivity: The Wage Returns to Sleep". *Williams College Department of Economics Working Papers*. <https://econpapers.repec.org/paper/wilwileco/2015-17.htm>

Giuntella & Mazzonna (2017). "Sunset Time and the Economic Effects of Social Jetlag Evidence from US Time Zone Borders". *Journal of Health Economics*. <https://www.sciencedirect.com/science/article/abs/pii/S0167629618309718>

Gu et al (2017). "Longitude Position in a Time Zone and Cancer Risk in the United States". *Cancer Epidemiology, Biomarkers & Prevention*. <https://cebp.aacrjournals.org/content/26/8/1306>

Jin & Ziebarth (2019). "Sleep, Health, and Human Capital: Evidence from Daylight Saving Time". *The National Bureau of Economic Research*. <https://ideas.repec.org/p/nor/hectda/15-27.htm>

Juda et al (2019). "An Open Letter to the BC Government in Support of Permanent Standard Time". *Simon Fraser University*. <https://vault.sfu.ca/index.php/s/Anv3Z4bcSwY4Gm>

Meira e Cruz et al (2020). "Putative contributions of circadian clock and sleep in the context of SARS-CoV-2 infection". *European Respiratory Journal*. <https://erj.ersjournals.com/content/55/6/2001023>

National Sleep Foundation (2021). "Permanent Standard Time: A Position Statement from the National Sleep Foundation". *NSF Issues*. <https://www.thensf.org/wp-content/uploads/2021/03/NSF-Position-on-Permanent-Standard-Time.pdf>

Panda (2020). "Beyond Sanitizing and Social Distancing—A Healthy Circadian Rhythm May Keep You Sane and Increase Resilience to Fight COVID-19". *The Conversation*. <https://theconversation.com/beyond-sanitizing-and-social-distancing-a-healthy-circadian-rhythm-may-keep-you-sane-and-increase-resilience-to-fight-covid-19-135535>

Ray & Reddy (2020). "COVID-19 Management in Light of the Circadian Clock". *Nature Reviews*. <https://www.nature.com/articles/s41580-020-0275-3>

Ripley (1974). "Senate Votes Return to Standard Time for Four Months and Sends Bill to Ford". *The New York Times*. <https://www.nytimes.com/1974/10/01/archives/senate-votes-return-to-standard-time-for-four-months-and-sends-bill.html>

Roenneberg et al (2019). "Daylight Saving Time and Artificial Time Zones – A Battle Between Biological and Social Times". *Frontiers in Physiology*. <https://www.frontiersin.org/articles/10.3389/fphys.2019.00944/full>

Schlanger (2017). "Daylight Saving Time as Americans Know It Was Instituted by Corporate Lobbies, Not Farmers". *Quartz*. <https://qz.com/1120488/daylight-saving-time-as-americans-know-it-was-instituted-by-corporate-lobbies-not-farmers/>

Silver (2014). "Which Cities Sleep In, and Which Get to Work Early?". *FiveThirtyEight*. <https://fivethirtyeight.com/features/which-cities-sleep-in-and-which-get-to-work-early/>

Skeldon & Dik (2019). "School Start Times and Daylight Saving Time Confuse California Lawmakers". *Current Biology*. [https://www.cell.com/current-biology/fulltext/S0960-9822\(19\)30312-4](https://www.cell.com/current-biology/fulltext/S0960-9822(19)30312-4)

Society for Research on Biological Rhythms (2019). "Why Should We Abolish Daylight Saving Time?". *Journal of Biological Rhythms*. <https://srbbr.org/advocacy/daylight-saving-time-presskit/>

Yorkshire (2018). "British Summer Time: Why Do We Change the Clocks?". *Yorkshire Evening Post*. <https://www.yorkshireeveningpost.co.uk/news/uk-news/british-summer-time-why-do-we-change-clocks-313791>

Oppose Permanent Daylight Saving Time

Forces early waking—decreases immunity and alertness.

Support Permanent Standard Time

Lets us sleep—for health, safety, and education.

“Permanent, year-round Standard Time is the best choice to most closely match our circadian sleep–wake cycle.

Daylight Saving Time results in more darkness in the morning and more light in the evening, disrupting the body’s natural rhythm.”

Muhammad Adeel Rishi MD
Mayo Clinic & American Academy of Sleep Medicine

<https://aasm.org/american-academy-of-sleep-medicine-calls-for-elimination-of-daylight-saving-time/>

 **SAVE STANDARD TIME**

“The human circadian system does not adjust to Daylight Saving Time.

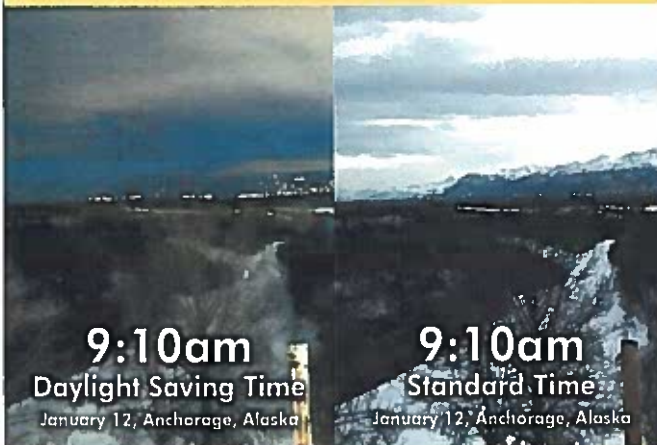
Sleep becomes disrupted, less efficient, and shortened... Permanent Standard Time is the healthier, more natural choice.”

Nathaniel F Watson MD MSc
Neurology Professor, University of Washington, Seattle

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6557642/>

 **SAVE STANDARD TIME**

Most work/school starts at 8am.
How would you rather start your day half the year?



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

 **SAVE STANDARD TIME**

8:03am average school start in the US. CDC, US ED, SASS, 2015. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a1.htm>
7:55am median work arrival in the US. S38, ACS, USCB, 2014. <https://www.nytimes.com/features/which-ones-sleep-in-and-which-get-to-work-early/>

Most work/school starts at 8am.
How would you rather start your day half the year?



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

 **SAVE STANDARD TIME**

8:03am average school start in the US. CDC, US ED, SASS, 2015. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a1.htm>
7:55am median work arrival in the US. S38, ACS, USCB, 2014. <https://www.nytimes.com/features/which-ones-sleep-in-and-which-get-to-work-early/>

“Cancer rates significantly increase when sunrise is later.

Permanent DST would make sunrise later, while permanent Standard Time would make sunrise closer to body time.”

Nicolas Cermakian PhD
President, Canadian Society for Chronobiology

<https://www.theglobeandmail.com/opinion/article-lets-back-the-clock-on-daylight-savings-why-standard-time-all-year/>

 **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/spring-forward-daylight-saving-time-is-obsolete-causing-unhealthy-choices-10/>

 **SAVE STANDARD TIME**



SAVE STANDARD TIME

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

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.

Organizations (non-comprehensive list)

National PTA
National Safety Council
American College of Chest Physicians
National Sleep Foundation
American College of Occupational/Environmental Medicine
Start School Later
Rabbinical Council of America
Society for Research on Biological Rhythms
Florida PTA
World Sleep Society
European Biological Rhythms Society
French Society for Sleep Research & Medicine
National Commission for Rationalization of Spanish Hours
California Islamic University
Agudath Israel of Florida
Francophone Chronobiology Society
Association of Canadian Ergonomists
Good Light Group
Catalunya Advisory Council for Timetable Reform
California Sleep Society
Michigan Academy of Sleep Medicine
Ohio Bicycle Federation
Wisconsin Sleep Society
Canadian Society for Chronobiology
Southern Sleep Society
Normal Time All the Time
German Society for Time Policy
Missouri Sleep Society
Solaris Fatigue Management
Sleep Medicine Association Netherlands
Chronobiology Lab Groningen
Better Times Platform
National Education Association
American Academy of Sleep Medicine
American Federation of Teachers
National School Boards Association
B-Society
American Academy of Dental Sleep Medicine
European Sleep Research Society
Agudath Israel of America
Society of Anesthesia & Sleep Medicine
German Teachers' Association
International Alliance for Natural Time
Society of Behavioral Sleep Medicine
American Academy of Cardiovascular Sleep Medicine
Portuguese Sleep Association
Society for Light Treatment & Biological Rhythms
Rabbinical Council of California
Agudath Israel of California
Northwest Noggin Neuroscience
Agudath Israel of Chicago
Daylight Academy
Kentucky Sleep Society
Maryland Sleep Society
Australasian Chronobiology Society
Cuyahoga Astronomical Association
Adath Israel San Francisco
Tennessee Sleep Society
Curtis Clock Lab
Capitol Neurology
Stephens Memorial Observatory
Dutch Society for Sleep-Wake Research
Dakota Sleep Society
Barcelona Time Use Initiative for a Healthy Society

Individuals (non-comprehensive list)

Raúl Aguilar-Roblero MD PhD, Laboratory on Circadian Rhythmicity, Institute of Cellular Physiology, Mexico
Konstantin V Danilenko MD PhD, Institute of Physiology & Basic Medicine, Novosibirsk, Russia
Elizabeth B Klerman MD PhD, Associate Professor, Harvard Medical School, Boston, Massachusetts
Michael T Lam MD PhD, San Diego, California
Michael McCarthy MD PhD, Center for Circadian Biology, University of California, San Diego
Thomas E Nordahl MD PhD, Professor Emeritus, University of California, Davis
David K Welsh MD PhD, Professor Emeritus, University of California, San Diego
Amir Zarrinpar MD PhD, Assistant Professor, San Diego, California
Salman Ahsan PhD, San Jose, California
Shimon Amir PhD, Professor, Concordia University, Montreal, Quebec
Sonia Ancoli Israel PhD, Professor Emeritus, University of California, San Diego

Michael Antle PhD, Professor, Hotchkiss Brain Institute & University of Calgary, Alberta
 Susanna Barry PhD, College Mental Health Counselor & Sleep Coach, Cambridge, Massachusetts
 William Bechtel PhD, Distinguished Professor, University of California, San Diego
 Mikhail Borisenkov PhD, Institute of Physiology, Komi Science Centre, Russian Academy of Sciences
 Joseph Boyd PhD, Research Scientist, MilliporeSigma, Temecula, California
 Hugo Calligaro PhD, San Diego, California
 Oscar Castanon-Cervantes PhD, Assistant Professor, Morehouse School of Medicine, Atlanta, Georgia
 Joanna C Chiu PhD, Vice Chair, Department of Entomology & Nematology, University of California, Davis
 Scott Cookson PhD, Quantitative BioSciences, San Diego, California
 Jason DeBruyne, PhD, Associate Professor, Morehouse School of Medicine, Atlanta, Georgia
 Grant Denn PhD, Physics Department Chair, Metropolitan State University of Denver, Colorado
 Heinz Freisling MSc PhD, Epidemiologist, International Agency for Research on Cancer, Lyon, France
 Frederic Gachon PhD, Group Leader, Physiology of Circadian Rhythms, Institute for Molecular Bioscience
 Susan S Golden PhD, Director, Center for Circadian Biology, University of California, San Diego
 Marijke CM Gordijn MS PhD, Chrono@Work, University of Groningen, Netherlands
 Bill Griesar PhD, Northwest Nuggin Neuroscience Outreach Group, Portland, Oregon
 Liz Harrison PhD, Center for Circadian Biology, University of California, San Diego
 Dietrich Henckel PhD, Professor, Technical University of Berlin, Germany
 Erik Herzog PhD, Professor of Biology, Washington University, St Louis, Missouri
 Myriam Juda PhD, Researcher, Simon Fraser University, Vancouver, British Columbia
 Achim Kramer PhD, Professor of Chronobiology, Charité – Universitätsmedizin Berlin, Germany
 Camilla Kring PhD, Speaker, Author, & Entrepreneur, Copenhagen, Denmark
 Kotja Lamia PhD, Associate Professor of Molecular Medicine, Center for Circadian Biology, UC San Diego
 Andy LiWang PhD, University of California, Merced
 Travis Longcore PhD, Institute of the Environment & Sustainability, University of California, Los Angeles
 Emily Manoogian PhD, Postdoctoral Fellow, San Diego, California
 Peter Mansbach PhD, Bethesda, Maryland
 Erik Maronde PhD, Scientist, Frankfurt, Germany
 Girish Melkani MS PhD, Associated Research Professor, San Diego, California
 Martha Merrow PhD, Professor of Chronobiology, Ludwig Maximilian University of Munich, Germany
 Matt Metzgar PhD, Clinical Professor of Economics, University of North Carolina, Charlotte
 Ralph Mistlberger PhD, Professor, Simon Fraser University, Vancouver, British Columbia
 João Nunes PhD, Biochemistry Researcher, Dresden, Germany
 Marie Pariallaud PhD, Postdoctoral Associate, Scripps Research, La Jolla, California
 Ketema Paul, PhD, University of California, Los Angeles
 Linda Petzold PhD, Professor, University of California, Santa Barbara
 Frank Powell PhD, Professor of Medicine, University of California, San Diego
 Kendall Satterfield PhD, San Diego, California
 Dorothy D Sears PhD, San Diego, California
 Lori L Shemek PhD, Health Expert & Bestselling Author, Dallas–Fort Worth, Texas
 Benjamin Smarr PhD, Professor of Bioengineering & Data Science, University of California, San Diego
 Andrea Smit PhD, Researcher, Simon Fraser University, Vancouver, British Columbia
 Barbara Sorg PhD, Legacy Research Institute, Portland, Oregon
 Melissa A St Hilaire PhD, Instructor, Harvard Medical School, Boston, Massachusetts
 Andrew Steele PhD, Associate Professor of Biological Sciences, California State Polytechnic University
 Jennifer Thomas PhD, Professor, San Diego, California
 Gianluca Tosini PhD, Chief Scientific Research Officer, Morehouse School of Medicine, Atlanta, Georgia
 Roger Tseng PhD, Biological Scientist, USDA, Ames, Iowa
 Judy Village PhD CCCPE, President, Association of Canadian Ergonomists, British Columbia
 Daniel S Whitaker PhD, Los Angeles, California
 Anna Wirz-Justice PhD, Professor Emeritus, Centre for Chronobiology, University of Basel, Switzerland
 Irving Zucker PhD, University of California, Berkeley
 Mariah Baughn MD, San Diego, California
 Steven M Croft MD FAAN, Neurologist, Houston, Texas
 Richard E Cytowic MD, Washington, DC
 Mona Ezzat MD, San Diego, California
 John F Gottlieb MD, Clinical Assistant Professor of Psychiatry & Behavioral Sciences, Chicago, Illinois
 Royan Komyar MD, Physician, La Mesa, California
 Jack Kruse DMD MD, Neurosurgeon, New Orleans, Louisiana
 Beth Malow MD MS, Medical Doctor & Researcher, Brentwood, Tennessee
 Melody T McCloud MD, Obstetrician-Gynecologist, Atlanta, Georgia
 Tessa Sugarbaker MD MFT, San Francisco, California
 Nathaniel F Watson MD MSc, Bainbridge Island, Washington
 Dr Archana G Chavan, University of California, Merced
 Dr Chelsea Gustafson, Assistant Professor, Portland, Oregon
 Dr Paul Kelley, Milton Keynes, United Kingdom
 Dr Irving Lebovics, Los Angeles, California

Mar 10, 2023

TO: Alaska State House Committee on Community and Regional Affairs (CRA)
FROM: Mr. Lynn Willis, Eagle River, Alaska

RE: Testimony relating to HB30: Short title: "OBSERVE DAYLIGHT SAVING TIME ALL YEAR"

While I and many Alaskans want to stop the now archaic and invasive bi-annual clock changing, HB30 as written will not serve that purpose without additional federal legislation forcing the entire nation to observe Daylight Saving Time year-round.

Why wait for that future federal action which may not happen? I request HB30 be amended to follow the examples of Arizona and Hawaii who opted out of observing Daylight Saving Time and therefore ended the bi-annual clock changing under current federal law (15 U.S. Code § 260a). This existing law allows the clock changing in Alaska to end now. The federal law states: " (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." Alaska, except for that portion lying in the Aleutian Islands, share a common time zone.

Prior to 1983 this hearing scheduled for 8:00 a.m. in Juneau would have required folks in Anchorage/Fairbanks to participate at 6:00 a.m. because Juneau then in the Pacific Time Zone was two hours ahead of Anchorage and Fairbanks. Residents in Nome and Bethel would have been required to participate at 5:00 a.m. because those communities in the former Bering Time Zone were three hours behind Juneau. This time difference served as an argument to move the Capital. Therefore, apparently to moot that argument the "mega" current Alaska Time Zone was created.

Do the sponsors of HB30 realize that those portions of Alaska that prior to 1983 were in the original Alaska Time Zone and the Bering Time Zone are already observing permanent Daylight Saving Time and have been since the entire state of Alaska (except for the Aleutian Islands) was forced into a single time zone in 1983. That 1983 time zone change required those areas of Alaska to permanently advance clocks, which is the definition of Daylight Saving Time.

RE: Testimony relating to HB30: Short title: "OBSERVE DAYLIGHT SAVING TIME ALL YEAR"

That action then also required communities in Southeast Alaska to turn back clocks and permanently leave the Pacific Time Zone where they had been since WWII. Do the sponsors of HB30 realize that during periods of DST the Sun is highest in the sky at 2:00 pm in Anchorage and 3:00 p.m. in Nome? Do they appreciate the loss of morning light that happens when you delay the time of sunset the day before? HB30 as written would ensure that Juneau will never be more than one hour behind Seattle. If Juneau wants to return to the Pacific time zone with Seattle let them petition the federal government to do so and deal with being in a different time zone from the rest of the State.

Again, I suggest HB30 be amended to end the use of Daylight Saving Time in Alaska now and let the Federal Government do what it may in the meantime. Thank you.