

# SAVE STANDARD TIME

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2021 February 14

Committee on Commerce & Tourism Michigan House of Representatives Lansing, Michigan

Re: HB-4052: Oppose—Amend to Standard Time

Dear Honorable Representatives,

Thank you for your commitment to the well-being of all in Michigan. I write on behalf of my nonprofit to ask you to oppose HB-4052, to refer it to the Committees on Health, Safety, Families, and Education, and to recommend its amendment to permanent Standard Time (draft amendment attached).

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 Michigan Academy of Sleep Medicine, National PTA, National Safety Council, American Academy of Sleep Medicine, American College of Chest Physicians, American College of Occupational & Environmental Medicine, Start School Later, and Society for Research on Biological Rhythms.<sup>[AASM][CSC][ESRS][RIVM][SRBR]</sup>

Healthy sleep is essential to viral immunity (including COVID),<sup>[Meira][Panda][Ray & Reddy]</sup> and for years the CDC has classified sleep deprivation as a nationwide epidemic.<sup>[Jin]</sup> Springing clocks forward to DST acutely deprives sleep. Leaving clocks forward on DST chronically deprives sleep (average 19 minutes nightly). An hour delay of sunrise each day (such as by DST) manifests as statistically significant increases in accidents, illness and disease (cancers up 12–36%), and healthcare costs, and as statistically significant decreases in education, productivity, and wages (down 3–5%). It's not just clock change that harms. Longitudinally correct Standard Time preserves morning sunlight, when human biology needs it most.<sup>[AASM][Borisenkov][CSC][Curtis][ESRS][Gibson][Giuntella][Gu][Jenkins][Juda][RIVM][Roenneberg][SRBR][Watson]</sup>

Scientific polling shows strong public support to end clock change, with slight preference for Standard Time.<sup>[AP]</sup> History shows public support for permanent DST reverses to opposition once its dark winter mornings are experienced.<sup>[BBC][Ripley][Yorkshire]</sup> Permanent DST would delay Michi-gan's sunrises to 9:33am, and past 8am for 5.2 months. It would undo the benefits of starting school later, and it would disrupt parents' work hours.<sup>[Cell Press][Skeldon & Dijk]</sup> Standard Time keeps most sunrises before 8am, when most work/school starts,<sup>[CDC][Silver]</sup> for healthier sunlight exposure, circadian alignment, sleep, alertness, immunity, and productivity.

Please oppose HB-4052 until it is amended to permanent Standard Time—as is federally preapproved and best for health, safety, education, and economy. I would be glad to provide committee testimonies and expert statements on this issue.

Sincerely yours,

Jay Pea Save Standard Time PO Box 40238 San Francisco, California 94140 iav@SaveStandardTime.com +1-415-484-3458

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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.

#### Organizations (non-comprehensive list)

National PTA National Safety Council American College of Chest Physicians 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 French Society for Sleep Research & Medicine National Commission for the Rationalization of Spanish Hours California Islamic University Society for Light Treatment & Biological Rhythms Rabbinical Council of California Agudath Israel of California Northwest Noggin Neuroscience 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** Barcelona Time Use Initiative for a Healthy Society

National Education Association American Academy of Sleep Medicine American Federation of Teachers 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 Society of Behavioral Sleep Medicine American Academy of Cardiovascular Sleep Medicine Agudath Israel of Florida Francophone Chronobiology Society Association of Canadian Ergonomists Good Light Group 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 **Dakotas Sleep Society** Abolish Time Change!

#### 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 Noggin 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 Katja 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 Pariollaud 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 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 Whittaker 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 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 Kamyar MD, Physician, La Mesa, California Jack Kruse DMD MD, Neurosurgeon, New Orleans, Louisiana Beth Malow MD MS, Medical Doctor & Researcher, Brentwood, Tennessee 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 Prof Stacey Harmer, University of California, Davis Betty C Jung MPH RN MCHES, New Haven, Connecticut Fabian Mohedano, President of Catalan Council for Vocational Training, Former Member of Parliament

## "Permanent Standard Time is the only fair, viable option.

"Permanent Daylight Saving could create real health/safety issues. Humans require adequate morning light so that our internal biological rhythms synchronize properly to local time. Lack leads to metabolic disorders, depression, cardiovascular disease..."

## Chancellor Gene Block PhD, UCLA Prof Johanna Meijer PhD, Leiden University

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### "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/

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# Most work/school starts at 8am.

How would you rather start your day half the year?



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8:03am overage school start in the US. CDC, US ED, SASS, 2015. https://www.cdc.gov/mmwr/preview/mmwr/html/mm6430a1.htm 7:55am median work prival in the US. 538, ACS, USCB, 2014. https://livehintykight.com/feotures/which-cities-sleep-in-and-which-get-to-work-early/

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"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 /www.theglobeandmail.com/opinian/article.tum-back-the-clack-on-daylight-savings-why-standard-time-oll-ye

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"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

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#### BILL TO END DAYLIGHT SAVING TIME BY PERMANENT STANDARD TIME

An act to amend the Government Code in relation to the state's computation of time; to provide that the state shall at all times observe the Standard Time of the United States; to exempt the state from the advancement of clocks to Daylight Saving Time; to provide an effective date; to repeal any conflicting laws; and to urge neighboring states to enact similar law.

**WHEREAS** Standard Time as currently defined by federal law provides a practical approximation of natural solar time;

**WHEREAS** changing clocks each year to Daylight Saving Time is unhealthy, unsafe, unpopular, and disruptive to education and to the economy;

WHEREAS the consensus of doctors, scientists, and experts in chronobiology, neurology, endocrinology, psychology, immunology, and other medical fields, and the consensus of teachers and children's advocates, is that only permanent Standard Time provides the best and most practical conditions for the public's sleep quality, physical health, mental wellbeing, roadway safety, workplace safety, workplace productivity, and learning capabilities;

**WHEREAS** history shows that only permanent Standard Time provides the most sustainable conditions for public support;

**WHEREAS** federal law permits states to opt out of Daylight Saving Time by observation of permanent Standard Time;

NOW, THEREFORE, BE IT ENACTED, that:

The state, and all political subdivisions thereof, shall at all times observe the Standard Time of the United States, as provided by the Uniform Time Act of 1966 (15 USC Sections 261 through 263);

The state, and all political subdivisions thereof, shall be exempt from the advancement of time as provided by the Uniform Time Act of 1966 (15 USC Sections 260a);

This act shall take effect on January 1 of the year following adoption of legislation to opt out of Daylight Saving Time in the states of Wisconsin, Illinois, Indiana, Ohio, and Pennsylvania;

All laws and parts of laws in conflict with this act shall be repealed;

And the state shall urge its neighboring states to enact similar law as soon as possible.