

# MISSOURI HOUSE OF REPRESENTATIVES WITNESS APPEARANCE FORM

BILL NUMBER: HB 822			DATE: <b>3/24/2021</b>
COMMITTEE:  Downsizing State Government			
<b>TESTIFYING</b> : ✓ IN SUPPORT OF	☐ IN OPPOSITION TO	☐FOR INFORM	ATIONAL PURPOSES
	WITNESS NAME		
INDIVIDUAL:			
WITNESS NAME: ARNIE C. "HONEST-ABE" DIENOFF-STATE	E PUBLIC ADVOCAT	PHONE NUMB	ER:
BUSINESS/ORGANIZATION NAME:		TITLE:	
ADDRESS:			
CITY:		STATE:	ZIP:
EMAIL: arniedienoff@yahoo.com	ATTENDANCE: Written	SUBMIT D 3/24/20	ATE: 21 12:08 PM
THE INFORMATION ON THIS FORM	IS PUBLIC RECORI	D UNDER CHAI	PTER 610. RSMo.

I Support this Bill. This needs to take place.



# WITNESS APPEARANCE FORM

BILL NUMBER: HB 822				DAT <b>3/2</b>	E: 2 <b>4/2021</b>
COMMITTEE:  Downsizing State Go	overnment			•	
TESTIFYING:	✓ IN SUPPORT OF	☐ IN OPPOSITION TO	☐FOR INFO	RMATIO	NAL PURPOSES
		WITNESS NAME			
INDIVIDUAL:					
WITNESS NAME: SCOTT YATES			PHONE N	UMBER:	
BUSINESS/ORGANIZATION I	NAME:		TITLE:		
ADDRESS:			·		
CITY:			STATE:		ZIP:
EMAIL: scott@yates.net		ATTENDANCE: Written	SUBN 3/24	MIT DATE: 1/2021 7	:41 AM

# THE INFORMATION ON THIS FORM IS PUBLIC RECORD UNDER CHAPTER 610, RSMo.

My name is Scott Yates, and I've been writing about DST for more than seven years now, and I've testified in probably 15 states now. Missouri was one of the first states that I wrote about when it first started considering bills to #LockTheClock, but some other states jumped ahead of you in taking action. There have been 16 states to pass similar bills to the ones before you today, and probably at least another 10 or so will pass something this year. Mississippi was the first state to get a bill signed by the Governor this year. In short, the time has come. Passing this bill may not have the immediate effect in the law of locking Missouri into DST, but it will have a strong influence in Washington. I've been working with the staffs of the sponsors of the federal bills for years now, and they always tell me that the strongest support they get always comes from the states that have passed bills just like this. The support has gotten so strong in recent years that now some opposition has emerged. There may be people who testify that locking into Daylight time is dangerous for school children. That's not true. In fact, research shows that pedestrians are six times safer walking near sunrise as they are near sunset, so permanent DST is a lifesaver for all pedestrians, especially school children. There is some science showing permanent DST is worse for circadian sleep cycles, but other scientists dispute that it's a significant factor, especially for a state like Missouri that's in the middle of the Central Time Zone.Other scientific research shows that permanent DST reduces crime, improves mental health, increases the time available to school children to exercise outside (which helps reduce childhood obesity). The bottom line is that I would support you if you wanted to #LockTheClock in permanent Standard or DST, but a recent poll that came out showed that 45 percent of Americans "strongly support" permanent DST, and another 23 percent "somewhat support" it. Only 14 percent either strongly or somewhat oppose it. What other issue before the Missouri legislature can you vote on that has only 14 percent opposition?In summary... Science is with you. Constituents are with you. Nearly every other state is with you. The time has come to fix... TIME!Thank you very much, and for links to all the research and much more, feel free to visit my blog: www.sco.tt/time



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TESTIFYING: IN SUPPOR	RT OF IN OPPOSITION T	O ☐FOR INFORM	MATIONAL PURPOSES
	WITNESS NAME		
INDIVIDUAL:			
WITNESS NAME: ANGIE MILLER		PHONE NUM	BER:
BUSINESS/ORGANIZATION NAME:		TITLE:	
ADDRESS:		·	
CITY:		STATE:	ZIP:
EMAIL: amiller1011@yahoo.com	ATTENDANCE: Written	SUBMIT 3/22/2	DATE: <b>021 6:26 PM</b>

# THE INFORMATION ON THIS FORM IS PUBLIC RECORD UNDER CHAPTER 610, RSMo.

I write as a Missouri citizen pleading for you to oppose HB-617, HB-822, and HB-848. These bills would shift sunrise to as late as 8:45 am and later than 8am for almost half of a school year. My son would not see the sun on those days until after school at 2:30p if this should pass at the federal level. He would travel to school in the dark from mid-October until late March. It amazes me that such strong consideration for permanent DST exists in this country at all—a nation clearly ignorant that we have tried this before. Like the United States, the UK and Russia also explored DST in winter. Each time it has been done—EACH time—the decision is reversed. Humans cannot thrive in a system that delays the sunrise so late while our work clocks are not also adjusted. Please keep as much a focus on sunrise times as sunset times in the consideration of these bills.Also—to clarify—each of these bills effectively hands over to the federal government (and by de facto the State government since this bill has been filed by a state legislator) the ability to force me to start my work day one hour earlier. What was on Standard Time 8am becomes 7am DST. What was 9p ST becomes 8p DST. This is how Daylight Saving Time works—shifting that precious hour from the morning to the evening, and effectively requiring every one of us to start our work (and school day) one hour earlier than we may want to start it, and one hour earlier than our bodies need it. That's a big government that decides I will go to work one hour earlier. And this is a committee to DOWNSIZE the government. I ask that you stay consistent with the spirit of this committee's name—and the ideology I know many of you hold as advocates of small government—and reject these bills. Establish a clock that works WITH the sun, not against it and one consistent with our relationship with light and dark cycles. Please advance HB-780, which would maintain Standard Time all year, like what is already done in Arizona, Hawaii, and US territories. This is action Missouri can immediately take. No permission from the federal government needed. I can handle my 4th of July fireworks at 8:30pm instead of 9:30p and my fishing excursions on a local lake wrapped up then too; what would make life far more difficult is dealing with the daily morning work on my hobby farm in darkness for nearly half of the year. We do not need to make a Missouri winter any harder than it already it by delaying the sunrise to later than 8am in the coldest days of a winter.



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<b>TESTIFYING:</b> □IN SUPPORT OF	✓ IN OPPOSITION TO ☐ FO	R INFORMATION	ONAL PURPOSES
	WITNESS NAME		
INDIVIDUAL:			
WITNESS NAME: ERIC LANDSNESS		PHONE NUMBER:	
BUSINESS/ORGANIZATION NAME:		TITLE:	
ADDRESS:			
CITY:		STATE:	ZIP:
EMAIL: landsness@wustl.edu	ATTENDANCE: Written	SUBMIT DATE 3/24/2021	6:18 AM

# THE INFORMATION ON THIS FORM IS PUBLIC RECORD UNDER CHAPTER 610, RSMo.

I am Eric Landsness, MD, PhD a sleep physician at Washington University in St. Louis, MO and I am writing to oppose permanent Daylight Savings Time (DST) and to strongly support Permanent Standard Time in Missouri. A wealth of reputable research supports the idea that DST, which results in exposure to daylight later in the day, makes it more difficult for people to wake up, and has overall negative effects on many aspects of health. While many people may like it staying light late at night in the summer, DST is associated with higher rates of obesity, diabetes, heart disease, depression, and cancer. In fact, when permanent DST was approved in the past (1974-5), people found they did NOT like it due to dark mornings in the winter, and it was repealed. The scientific data is clear-permanent standard time is the best option in terms of health and overall happiness. Permanent Standard Time prevents dark winter mornings, and also avoids exposure to light late in the evening during the summer. All major sleep and circadian rhythm research societies support Permanent Standard Time, and I hope you will to. Sincerely, Eric Landsness MD, PhDDepartment of Neurology Washington University – St. Louis



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TESTIFYING:	☐IN SUPPORT OF	✓ IN OPPOSITION TO	☐FOR INFOR	MATIONAL PURPOSES
		WITNESS NAME		
BUSINESS/ORG	ANIZATION:			
WITNESS NAME: JAY PEA			PHONE NU <b>415-484</b>	
BUSINESS/ORGANIZATION SAVE STANDARD			TITLE: NONPR	OFIT FOUNDER
ADDRESS: PO BOX 40238				
CITY: SAN FRANCISCO			STATE: CA	ZIP: <b>94140</b>
EMAIL: jay@savestandard	dtime.com	ATTENDANCE: Written		T DATE: 2021 5:35 PM

# THE INFORMATION ON THIS FORM IS PUBLIC RECORD UNDER CHAPTER 610, RSMo.

2021 March 22Committee on Downsizing State GovernmentMissouri House of Representatives201 West Capitol Avenue Jefferson City, Missouri 65101Re: Oppose HB-617, HB-822, HB-848—Amend to Permanent Standard Time Support HB-780Dear Honorable Representatives, Please oppose HB-617, HB-822, and HB-848 until amended from permanent Daylight Saving Time (DST) to permanent Standard Time. Please advance HB-780, which is already written for permanent Standard Time. Permanent DST is federally forbidden, and it was a lethal disaster in 1974. Its forced early waking harms us more than clock change. Permanent Standard Time can improve viral immunity with better sleep, it will protect start times with morning sunlight, and it is pre-approved by the US Uniform Time Act. 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 Missouri Sleep Society. Kentucky Sleep Society, Tennessee Sleep Society, Southern Sleep Society, 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, American Academy of Dental Sleep Medicine, and Society for Research on Biological Rhythms (sample expert statements email).[AASM][CSC][ESRS][NSF][RIVM][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.[Jin] Springing clocks forward to DST acutely deprives sleep. Leaving clocks forward on DST chronically deprives sleep (estimated average 19 minutes nightly). Artificial delay of sunrise by one hour each day (such as by DST) manifests as statistically significant increases in accidents, in illness and disease (certain cancers up 12-36%), and in healthcare costs, and as statistically significant decreases in learning, in productivity, and in wages (down 3-5%). It's not just clock change that harms. Sun-based, longitudinally correct Standard Time preserves morning sunlight, when human biology needs it most.[AASM][Borisenkov][CSC][Curtis][ESRS][Gibson][Giuntella][Gu] [Juda][RIVM][Roenneberg][SRBR]Permanent Standard Time is the quickest end to clock change; the Uniform Time Act of 1966 permits permanent Standard Time and forbids permanent DST. Scientific polling shows strong public support to end clock change, with slight preference for Standard Time. [AP] History shows support for permanent DST reverses to opposition once its dark mornings are experienced.[BBC][Ripley][Yorkshire] Permanent DST would delay Missouri's sunrises to 8:45am. and past 8am up to 3.6 months (example photos emailed). It would undo benefits of starting school later, and it would disrupt parents' work hours.[Cell][Skeldon] Standard Time keeps sunrises before 8am, when most work/school starts,[CDC][Silver] for healthier sleep, immunity, alertness, and productivity.Please oppose permanent DST and support permanent Standard Time—as is federally preapproved, supported by history, and best for health, safety, education, and economy. Sincerely, Jay PeaFounder & Presidentiay@savestandardtime.comSave Standard

Timesavestandardtime.comtwitter.com/savestandardlinkedin.com/in/savestandard415-484-3458• 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-ofdaylight-saving-time/• AP-NORC (2019). "DST vs Standard Time". Center for Public Affairs Research. https://apnorc.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-fromelsewhere-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 Sevenyear\_survey\_of\_sleep\_timing\_in\_Russian\_children\_and\_adolescents\_chronic\_1h forward transition of social clock is associated with increased social jetlag and winter patter n\_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-whystandard-time-all-year/• Cell Press Staff (2019). "Permanent Daylight Savings May Cancel Out Changes to School Start Times". EurekAlert!. https://www.eurekalert.org/pub\_releases/2019-04/cppds041819.php• Centers for Disease Control and Prevention (2015). "School Start Times for Middle School and High School Students - United States, 2011-12 School Year". 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"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• 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 & Dijk (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• Society for Research on Biological Rhythms (2019). "Why Should We Abolish Daylight Saving Time?". Journal of Biological Rhythms. https://srbr.org/advocacy/daylight-saving-timepresskit/• 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-wechange-clocks-313791



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COMMITTEE:  Downsizing State Government		·	
<b>TESTIFYING:</b> □IN SUPPORT OF	✓ IN OPPOSITION TO ☐F	OR INFORMATIO	ONAL PURPOSES
	WITNESS NAME		
INDIVIDUAL:			
WITNESS NAME: LAETITIA MOREAU		PHONE NUMBER:	
BUSINESS/ORGANIZATION NAME:		TITLE:	
ADDRESS:			
CITY:		STATE:	ZIP:
EMAIL: laetitiamImoreau@gmail.com	ATTENDANCE: Written	SUBMIT DATE: 3/24/2021 1	2:33 AM

# THE INFORMATION ON THIS FORM IS PUBLIC RECORD UNDER CHAPTER 610, RSMo.

I oppose this DST bill HB822 that would impose Advanced time during the winter. The population would suffer at health level, physically, intellectually and mentally. Accidents, in particular in the morning, would be more likely. The population would also suffer from an increased financial burden in utility bills. The medical community has gathered around the AASM American Academy of Sleep Medicine to advise against adopting year-round Advanced timeAASM (2020), "American Academy of Sleep Medicine calls for Elimination of Daylight Saving Time". Press release and position statement, https://aasm.org/american-academy-of-sleep-medicine-calls-for-elimination-of-daylight-saving-time/The increase in heating bills has been described on heating by electricity in the Spring and Fall in Indiana (Kotchen in 2008, https://www.nber.org/papers/w14429). It would also apply to heating by other means, gas, wood, etc...Quote here: "There is also evidence for a heating effect that causes an increase in electricity consumption. When temperatures are such that heating is necessary, having an additional hour of darkness in the morning, which is the coldest time of day, increases electricity consumption. Kellogg and Wolff (2006) find evidence for the heating effect in their study of DST extensions in Australia. While the magnitude of the heating effect does not appear to be as large in our Indiana simulation results, it is likely to be more substantial when considering extensions to DST, which push further into the colder and shorter days of the year. "A better bill would stop time changes also but keep year-round a natural standard time, closer to local solar time. I understand such a bill has been introduced, bill HB780.



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	WITNESS NAME		
INDIVIDUAL:			
WITNESS NAME: SANDRA KAY WINGO		PHONE NUMB	ER:
BUSINESS/ORGANIZATION NAME:		TITLE:	
ADDRESS:			
CITY:		STATE:	ZIP:
EMAIL: sggwingo@mchsi.com	ATTENDANCE: Written	SUBMIT D 3/23/20	ATE: <b>21 11:34 AM</b>
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Research has shown that daylight saving has a negative impact on people. To have year round daylight saving would mean darkness during the winter months far into the morning. This is dangerous for children getting to school...by walking, or waiting for a bus. Mother Nature provides longer hours of daylight as we move toward the Summer Solstice. The artificial loss of an hour resulting in later morning darkness is detrimental and pretending we have more daylight defies reason.



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	WITNESS NAME		
INDIVIDUAL:			
WITNESS NAME: SETH MILLER		PHONE NUMB	ER:
BUSINESS/ORGANIZATION NAME:		TITLE:	
ADDRESS:			
CITY:		STATE:	ZIP:
EMAIL: earthtoaster@gmail.com	ATTENDANCE: Written	SUBMIT D 3/22/20	ATE: <b>21 7:46 PM</b>

# THE INFORMATION ON THIS FORM IS PUBLIC RECORD UNDER CHAPTER 610, RSMo.

My name is Seth Miller, I'm from Springfield, and I am opposed to HB-617, HB-822, and HB-848, The biggest reason I am opposed to is how difficult it is to wake up in the dark anyway in December and January. These bills would make it worse. This would make it dark every morning starting in the fall and going all the way until April. I don't like the idea of waking up in the dark so many mornings of school and feeling so sleepy as a result. My school starts at 7:30 in the morning and these bills would keep the sun from rising even before my school day starts for several months. I will begin driving to school next year and, as an athlete, am looking forward to having my own car after practices so I won't have to wait for parents. I do worry about driving in the dark so many mornings while so tired, on top of dealing with Missouri winter weather which causes slick roads. Another reason I am opposed to HB-617, HB-822, and HB-848 is because of the weather. Winter weather makes winter mornings difficult sometimes. I've had 2 weeks of missed days of school this winter due to the weather, but that number might even be higher if the sun had risen as late as 8:30 in early February. It would have made it hard for my school to decide whether it was safe for us to go because of the combination of slick roads with cold temperature, and darkness.I also want you to know that Russia actually passed a law similar to these bills, putting everyone in Russia an hour ahead in what the Russians call "Summer Time." Russia did this in 2011 and by 2014 completely got rid of Summer Time because of the cold, dark mornings. I think we can learn something from and avoid the same mistake. Please don't support HB871. I don't want to wake up so long before sunrise for so many mornings. I don't think you do either. Thank you for letting me share my feelings about HB-617, HB-822, and HB-848.