

Date: March 27, 2025

To: Senate State and Local Government

From: Jon Bell-Clement

Subject: Strong support for HB1259

My name is Jon Bell-Clement, and I'm a college biology instructor in the F-M area. I'm writing to urge the ND Senate to vote **IN FAVOR** of the HB1259 bill removing daylight savings time (DST). I implore legislators to make their decisions based on data as opposed to handfuls of personal stories and anecdotes, and in this letter I've provided research-based evidence for why overall, observing DST is NOT a good idea

Below is a list of reasons both for and against DST. Admittedly, while there are valid points for each case, they are NOT weighed equally. It may be enticing to observe DST to enjoy more recreation without artificial lighting, but **it comes at the cost of human life, physical health, and workplace efficiency**

Pros of DST:

- Outdoor recreational activities can resume for an additional hour
 - Citizens seem to prefer evenings to mornings for recreation
 - Reduces need for artificial lighting later in the evening
 - Less artificial lighting at night reduces light pollution
 - Golf courses and camp sites would have more hours (without artificial light) available to patrons
- Daylight does not start "too early," functionally before many workdays begin (usually around 5 or 6am for most industries)
 - The sun would rise around 4:15am, and in some industries, working is not allowed prior to 7am, making this additional hour of daylight pointless

Cons of DST:

- **Disrupts circadian sleeping rhythms in most people**
 - **Altered sleeping schedules increase safety risks especially when driving.**
 - **Car accidents are more common when drivers are impaired**
 - **Sleep deprivation has also been correlated with cardiovascular diseases, one of the leading causes of death in Americans**
 - Increased fatigue also affects work and school performance.
 - **Workers who are tired are more likely to make mistakes that can incur avoidable expenses on companies**

- Students who are tired perform worse academically and have thus have fewer career opportunities
 - **Sleep is integral to brain development and improved mood. Observing DST may increase mood disorders and stunt brain growth**
 - Increased fatigue may stress social interactions as people may be more irritable or skip out on social events to take naps
 - Also disrupts rhythms of livestock, pets, and working animals
 - May also disrupt rhythms of wildlife that live near urban areas
- **Energy saving is negligible**
 - **This practice DID save energy historically, but less so currently as light bulbs become more efficient**
 - **Savings in light energy may be offset by increases in air conditioning usage due to solar radiation**
- Inconsistencies with scheduling with other states and regions
 - Impedes national efforts to abolish DST to make scheduling more convenient
 - Even if ND is less affected by DST than other regions, adhering to a standardized schedule would make it easier to coordinate and correspond with other states

In short: if the choice comes down to an additional hour of recreation (without artificial lighting) or **human life and improved mental wellbeing, there should be no question about which should take higher priority**

I also urge you to consider the points made by Jay Pea. I have never met Jay, but upon reading his testimony on the website, it is evident that he is well-informed and has a broad, holistic view on the issue and is not biased by a local, narrow perspective

Here is a list of references for why observing DST is losing viability and should be abolished going forward, namely because of impacts on human health and road collisions as well as negligible energy savings. Thank you for your time and please vote **YES to this bill!**

1. <http://large.stanford.edu/courses/2021/ph240/segal2/#:~:text=Studies%20on%20Energy%20Saving&text=One%20meta%2Danalysis%20of%2044,and%20location%20of%20the%20study.>
2. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7205184/>
3. <https://direct.mit.edu/rest/article-abstract/103/1/165/97763/Spring-Forward-Don-t-Fall-Back-The-Effect-of>
4. <https://bmjopen.bmj.com/content/7/6/e014319.short>
5. <https://link.springer.com/article/10.1007/s11739-018-1900-4>

6. <https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1007927>
7. https://www.sciencedirect.com/science/article/pii/S0167268119303865?casa_tok=en=QRXJMZSESNcAAAAA:zXF9G_aNc32uZqPfsNLNe4_HieltbfundDYqGOebV2jvdXJRkb2iyPWJlZVm6JXPHrRGEQaavDE