

Intelligence MEMOS



From: Blake Shaffer
To: Clock-Switching Canadians
Date: March 6, 2018
Re: **TO CHANGE OR NOT TO CHANGE? THE DAYLIGHT SAVINGS DEBATE WON'T DIE**

Like clockwork, twice a year most of Canada — except for Saskatchewan and other enlightened and independent-minded locales — shift the clocks forward and back one hour. Also like clockwork, Canadians revisit the debate over the merits of daylight saving time (DST).

Talk almost became action in Alberta last year. A private member's bill was put forth to abolish DST. Public consultations ensued, but differing opinions over whether to permanently shift forward or back stalled any consensus. The nail in the coffin came from Big Hockey, which argued that avid hockey fans wouldn't be able to handle the discord in viewing schedules, and Big Airlines, who said flight schedules would be disrupted by the uncoordinated one-hour shift. In the end, the argument that *going it alone* on DST would lead to economic disruption won the day.

There are merits to this argument.

In the US, roughly half of all states have current legislation or recommendations to consider abolishing the DST transition. But most of these come with caveats along the lines of: "*will switch if others switch*". A commission in Massachusetts, for example, recently recommended that the state permanently remain on DST, but only if the other New England states follow suit.

In another highly coordinated (at time of writing) market, the European Union has mused about revisiting its DST policy. Last month, the EU Parliament voted 384 to 153 to have a special commission review whether or not the semi-annual switch makes sense.

What does the literature tell us?

The long-argued reason for DST is energy savings. As Benjamin Franklin famously noted, the sun rises far earlier than many people do. Shifting forward means more sunlight in otherwise dark hours when people are awake, at the sacrifice of less sunlight when many are still sleeping.

In [recent research](#), however, I find this depends on location. In regions where people wake early and/or the sun rises late, this statement does not hold. In early-waking and late-sun-rising Alberta, I find DST *increases* electricity use. Yet, in [Ontario](#), where the sun rises early and Torontonians love their sleep (I'm joking. Okay, I'm not. The data bears this out.), DST saves electricity.

In Europe, where the CET time zone stretches from Spain to Poland, the regional effects are likely to differ dramatically. In the east, an early sunrise likely means energy savings, whereas in the west, the opposite is true. (Then again, Spaniards are not exactly renowned early-risers, so perhaps not.)

Regardless of regional effects, advances in energy efficient lighting (LEDs use 1/10th the electricity per lumen as incandescent bulbs) means light-sensitive electricity use is waning. In sum, the effect of DST on energy use is likely to be small and regionally-mixed, and no longer a strong argument by itself for DST.

Perhaps the more convincing argument for DST policy is related to health. [Wolff and Makino](#) (2017) find that the additional evening sunlight leads to more outdoor physical activity. They find DST results in a whopping 10 percent increase in caloric burn, leading to the argument that DST is more of a health policy than an energy one.

Regardless of whether one shifts permanently forward or back, there are benefits of simply stopping the semi-annual change of the clocks. Disrupting sleep patterns has been found to have significant adverse effects, leading to a [6 percent increase in fatal car accidents](#) and [greater incidence of heart attacks](#). And we haven't even begun to quantify how annoying it is for parents.

Meanwhile, the debate continues. The only certainty is that it is sure to ramp up again the next time the clocks change.

Blake Shaffer is a PhD candidate at the University of Calgary, fellow-in-residence at the C.D. Howe Institute.

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