



18th Legislative Assembly of the Northwest Territories

Standing Committee on Social Development

*Report on Motion 32-18(2), Referral of
Petition 6-18(2): Elimination of Time Change
in the Northwest Territories to the Standing
Committee on Social Development*

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**STANDING COMMITTEE ON
SOCIAL DEVELOPMENT**

**REPORT ON MOTION 32-18(2), REFERRAL OF PETITION 6-18(2):
ELIMINATION OF TIME CHANGE IN THE NORTHWEST TERRITORIES
TO THE STANDING COMMITTEE ON SOCIAL DEVELOPMENT**

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STANDING COMMITTEE ON SOCIAL DEVELOPMENT

REPORT ON MOTION 32-18(2), REFERRAL OF PETITION 6-18(2): ELIMINATION OF TIME CHANGE IN THE NORTHWEST TERRITORIES TO THE STANDING COMMITTEE ON SOCIAL DEVELOPMENT

INTRODUCTION

On March 9, 2017, Motion 32-18(2), *Referral Of Petition 6-18(2): Elimination of Time Change in the Northwest Territories to the Standing Committee on Social Development* charged the Committee with reviewing the petitioners' call to eliminate the biannual time change associated with Daylight Saving Time, or DST.

In our review of this complex issue, the Committee considered studies that were comprehensive, recent, and undertaken with policy-making in mind, examining DST and human health, accident rates, energy use, and economic impacts. We also sought studies investigating DST in other circumpolar regions and followed the work of our legislative colleagues in Alberta on a similar initiative. Today we recommend that changes to the Northwest Territories' observance of DST not be pursued at this time.

BACKGROUND

DST is the practice of moving clocks ahead in the spring and back in fall. It was observed intermittently in North America in the first half of the 20th century, and its adoption in Canada was tied to time standardization. More recently, DST has been synchronized throughout North America, with the exception of one Canadian province, a small number of municipalities, and a few American states.

In the Northwest Territories, the Department of Justice administers the *Daylight Saving Time Regulations*, under the *Interpretation Act*. These regulations were last amended in 2007 in response to amendments at the federal level in the United States of America.

JURISDICTIONAL COMPARISON

Today, DST is observed in at least 70 countries and affects roughly one billion people. Notably, Japan, India, and China do not observe DST, although various informal systems are used to address regional disparity.

Apart from Alberta, no Canadian province or territory has seriously amended their DST practices. However, the matter has garnered some public interest. Here in the Northwest Territories, Petition 6-18(2) received 533 signatures from residents of at least

18 communities. In Yukon, the Association of Yukon Communities intends to engage their government "to determine if there is a case for removing [DST] in the territory."

In Alberta, Bill 203, *Alberta Standard Time*, was introduced in March 2017. This Private Member's bill proposed that the province adopt DST permanently. It received significant attention, attracting almost 14,000 public submissions, largely via response to an online survey. Because Alberta is our closest administrative and business partner, we have followed these developments closely. We note that the Standing Committee on Alberta's Economic Future has recommended that Bill 203 not proceed and that DST observance continue unchanged. That committee also highlighted the importance of "a coordinated approach" with other jurisdictions in any future initiatives.

ISSUES

Mental and Physical Health

We found that negative physical and mental health impacts associated with "spring ahead" are negligible, while in contrast, positive health impacts were observed at "fall back." This is linked to the amount of sleep a person may have in a night, as "fall back" can bring an extra hour of rest. Similarly, we found that rates of negative health outcomes such as heart attacks associated with "spring ahead" were also linked to sleep, and that risk could be mitigated with appropriate precautions, such as going to bed earlier. A policy focus not on DST, but on improved sleep accessibility, awareness, hygiene, and quality may achieve desirable positive impacts on population health, particularly for those already sleep-deprived or at risk of poor health.

Pedestrian Accidents and Vehicle Collisions

It is also commonly speculated that pedestrian accidents and vehicle collisions increase around days of time-change, particularly "spring ahead." We found that where such rates increased in American states, these were linked to driver fatigue and driver error as a result of sudden changes in daylight.

However, it is difficult to usefully compare such studies to the Northwest Territories, given our unique environment, small population, and comparatively low collision rates. Since 2007, an average of 33 collisions per year were attributed to alcohol, compared to an average of just one per year attributed to fatigue. Since 1997, collisions have also been more likely to occur in January, one of our darkest and coldest months, not the months of "spring ahead" or "fall back."

Petition 6-18(2) proposes that the permanent adoption of DST will "result in an extra hour of daylight at the end of the day during the darkest months of the year." However, because of our territory's unique geography, there is notable variance in daylight hours between our 33 communities. The experience of such a change would be limited and largely subjective, depending on one's location.

Energy Consumption, Economic Impacts, and Local Contexts

Researchers have also speculated that DST supports fuel conservation and/or reduces energy consumption. However, we found that DST's impacts on energy consumption are dependent on unique local geographic and social factors, including sunrise/sunset times, average wake-up times, and average commute duration. For example, while DST was found to slightly increase energy demand in Alberta, it was found to reduce demand in Ontario. As with pedestrian and vehicle collision data, replicating these studies in the Northwest Territories is beyond the scope of the Committee's work.

Similarly, although various researchers have explored the impacts of DST on consumer spending and local economies, such work would be difficult to usefully replicate here at this time. Generally, however, it is reasonable to expect that any changes to DST observance would have broad economic impacts, even more so if the territory were to fall out of alignment with Alberta. Any work or leisure activity requiring regular communication with or travel to other jurisdictions, from business meetings to television broadcasts, would likely be impacted.

Should amendments to the *Daylight Saving Time Regulations* be pursued in the future, these questions will require further exploration. We would expect that, should such a situation arise, the Government of the Northwest Territories would engage the public, including stakeholders in industry, education, government departments, community governments, and non-governmental organizations.

Recommendation 1

The Standing Committee on Social Development recommends, should the Government of the Northwest Territories consider changes to the *Daylight Saving Time Regulations* in future, that it engage with its counterparts in Alberta and undertake both broad public and targeted stakeholder engagement.

CONCLUSION

This concludes the Committee's *Report on Motion 32-18(2), Referral of Petition 6-18(2): Elimination of Time Change in the Northwest Territories to the Standing Committee on Social Development*. All committee reports are available online at the Legislative Assembly website: www.assembly.gov.nt.ca.