



Daylight Saving Time Public Consultation

Final Report

August 2019

Prepared for:

BC Government Communications and Public
Engagement

Prepared by: R.A. Malatest & Associates Ltd.





Contact Information:

Joanne Barry

R.A. Malatest & Associates Ltd.

Phone: (250) 384-2770 x406

E-mail: j.barry@malatest.com

Web: www.malatest.com

EXECUTIVE SUMMARY

The B.C. Government Communications and Public Engagement division (GCPE) hosted an online public engagement to provide British Columbians the opportunity to share their views on whether to continue to observe Standard Time (ST) in winter and Daylight Saving Time (DST) in summer or switch to DST year-round. British Columbians were also asked how important it is to them that B.C. aligns its time observance with neighbouring provinces, territories and states. The consultation, which ran from June 24 – July 19, 2019 consisted of a short online survey, and the opportunity for experts and organizations to send in written submissions.

The public engagement resulted in 223,273 completed surveys, 279 email submissions from private citizens, and 15 written submissions from organizations and experts.

Respondents largely favour a change to year-round DST observance.

Overall, 93% of respondents preferred a change to year-round observance of DST, while 7% indicated a preference to stay with the current system of bi-annual time changes.

Support for year-round DST observance is strong across regions, industries, and occupational groups.

Across all regions, support for a change to year-round DST was over 90%. Similarly, across all industry groups, and all occupational groups except for students, support for year-round DST observance was higher than 90%.

Safety, health and wellness concerns are the main reasons for support of year-round DST observance.

Three-quarters (75%) of those who preferred year-round DST identified health and wellness concerns as a reason for their support. Slightly more than one-half (53%) of these respondents also noted the benefits of additional daylight during the evening commute in winter, and 39% identified other safety concerns generally as reasons for their support for year-round DST observance.¹

Those who support continuing the bi-annual time change cite balancing daylight hours throughout the year as a concern.

Three-quarters (74%) of those who indicated a preference for retaining the bi-annual time changes identified balancing daylight hours throughout the year as a main reason for their preference. Slightly more than one-third of these respondents (36%) identified health and wellness concerns as a reason for their preference for bi-annual time changes.²

¹ Respondents could select as many reasons as applicable, therefore proportions add to more than 100%.

² Respondents could select as many reasons as applicable, therefore proportions add to more than 100%.

The majority of organization and expert submissions supported ending the bi-annual time change, although these groups were split on which time to observe year-round.

Ten of the fifteen formal submissions from organizations and experts supported ending the bi-annual time change. However, there was no consensus on which year-round time to observe: six submissions preferred year-round observance of DST, while four preferred year-round observance of ST.

Alignment with other jurisdictions was identified as an important consideration in this change.

Slightly more than one-half of all survey respondents (54%) responded that it was important or very important for B.C. to be aligned with neighbouring jurisdictions in its time observance practices. Further, five formal submissions from organizations and experts identified alignment with other jurisdictions as a priority when considering any proposed change to year-round DST.

TABLE OF CONTENTS

SECTION 1: BACKGROUND	1
1.1 Daylight Saving Time and Biannual Time Changes.....	1
1.2 Issues to Consider in Changing to Year-Round Daylight Saving Time.....	1
1.3 Purpose of Public Consultation	2
SECTION 2: METHODOLOGY.....	3
2.1 Approach	3
2.1.1 Online Survey	3
2.1.2 Written Submissions	4
2.1.3 Consultation Period	4
2.2 Analysis	4
2.3 Limitations.....	5
SECTION 3: FINDINGS – PARTICIPANTS.....	7
3.1 Overall Response	7
3.2 Demographic Breakdown of Respondents	7
3.2.1 Region	7
3.2.2 Gender	8
3.2.3 Age	8
3.2.4 Indigenous Respondents.....	9
3.2.5 Industry and Occupation.....	9
SECTION 4: FINDINGS – ATTITUDES TOWARDS YEAR-ROUND DAYLIGHT SAVING TIME	12
4.1 Overall Attitudes.....	12
4.1.1 Main Summary.....	12
4.1.2 Reasons for Preferences	13
4.2 Comparisons by Demographic Factors of Interest	17
4.2.1 Region	18
4.2.2 Age	20
4.2.3 Industry	21
4.2.4 Occupation	23
SECTION 5: RESPONSES FROM WRITTEN SUBMISSIONS.....	26
5.1 Preference for Bi-Annual Time Change or Year-Round Observance of DST.....	26
5.2 Alignment with Other Jurisdictions.....	27
5.3 Other Issues Raised	27
5.4 Emails Received from Private Citizens.....	27
5.4.1 Concerns about the Survey Itself.....	28
5.4.2 Concerns for Specific Groups of People.....	28
5.4.3 Influence of the United States	28
5.4.4 Alignment with Canadian Jurisdictions.....	28
5.4.5 Health and Safety Issues	28
SECTION 6: CONCLUSIONS	29

APPENDIX A: SURVEY BACKGROUNDER

APPENDIX B: SURVEY INSTRUMENT

APPENDIX C: OPEN-ENDED COMMENTS CODING FRAMEWORK

APPENDIX D: DATA TABLES

SECTION 1: BACKGROUND

1.1 Daylight Saving Time and Biannual Time Changes

Daylight Saving Time (DST) is the period from mid-March to mid-November of each year when clocks are set forward one hour from Standard Time (ST). As a result of the change, sunrise and sunset occur one hour later than they would on Standard Time. Conversely, during the winter period from mid-November to mid-March when B.C. observes ST, the sun rises and sets one hour earlier than it would on Daylight Saving Time.

Observance of DST in Canada began in 1915 as an effort to reduce coal consumption, extend daylight hours for factory work, and to aid in the war effort. Beginning in 1945, provinces took over responsibility for legislating time observance, including DST, and in 1952, 54% of British Columbians voted in favour of a plebiscite to introduce DST observance. In B.C., some communities in the Peace River region and the Kootenays have adopted Mountain Standard Time, or Mountain Daylight Time, to align with Alberta for all or part of the year.

1.2 Issues to Consider in Changing to Year-Round Daylight Saving Time

A number of studies have examined the impacts of changing clocks bi-annually on road safety, critical health incidents, and energy consumption. Overall, there are conflicting results, with some studies identifying negative effects of time changes (e.g., increased vehicle accidents, increased heart attaches, increased energy consumption) while others show no effects of the time change.³

The states of California, Oregon, and Washington all currently have bills in process that would make DST observance permanent year-round in those jurisdictions.⁴ As these three states are in the same time zone as both B.C. and Yukon, and B.C. has considerable business connections along the west coast of North America, B.C. has been in consultation with these other jurisdictions to consider a similar change to observance of DST.

This information was included as a backgrounder document for respondents to read before completing the online survey. A copy of this document is included in **Appendix A**.

³ Information taken from Daylight Saving Time “Backgrounder”, published by B.C. Government Communications and Public Engagement on the Daylight Saving Time Public Engagement website.
<https://engage.gov.bc.ca/daylightsavingtime/background/>

⁴ It is important to note that states in the United States do not have the power to change laws regarding the observance of time. Authorization would be required from the federal government for this change to occur in each of the three states.

1.3 Purpose of Public Consultation

The purpose of this public consultation was to provide British Columbians the opportunity to share their views on whether B.C should continue to observe the bi-annual time change, and how important it is that B.C aligns with neighbouring provinces, territories and states. A variety of concerns, ranging from personal preference to business considerations to health concerns, may play a role in British Columbians' attitudes towards the proposed change. This consultation will help decision-makers better understand these concerns and to use this feedback, in addition to decisions adopted by neighbouring jurisdictions, to determine the best course of action for B.C.

SECTION 2: METHODOLOGY

2.1 Approach

This public consultation was designed and hosted by the B.C. Government Communications and Public Engagement division (GCPE) and the Ministry of Attorney General (MAG), which is responsible for the statutory provisions relating to time in the provincial *Interpretation Act*. Analysis of survey data and reporting was conducted by a contracted firm, R.A. Malatest & Associates Ltd. (Malatest).

2.1.1 Online Survey

The online survey was the main approach used to collect feedback from a broad sample of British Columbians. The survey was developed by GCPE and MAG, and hosted by the B.C. Government on its public engagement platform at <https://engage.gov.bc.ca/daylightsavingtime/>.

The survey was short (about five minutes to complete) and asked four questions about respondents' attitudes towards a change to year-round observance of DST:

- Whether respondents preferred observing DST year-round or retaining the bi-annual time change;
- Reason(s) for respondents' preference;
- Whether respondents felt alignment with neighbouring provinces, territories and states was important; and
- Whether respondents believed that B.C. should decide this issue independently, or move to align with the decisions of the three states on the Pacific Coast (Washington, Oregon, and California).

The survey also asked six demographic questions of respondents:

- Gender;
- Indigenous identity;
- Region;
- Age;
- Occupation; and
- Industry.

Occupation and industry categories were structured largely on Industry Canada's North American Industry Classification System (NAICS) and National Occupational Classification (NOC) classification systems.

A copy of the survey instrument is included in **Appendix B**.

During the consultation period (June 24 to July 19, 2019), ServiceBC received 96 calls regarding the Daylight Saving Time consultation. These callers were directed to access a link to complete the survey themselves. In addition, four hard copy versions of the survey were received during the consultation period.

2.1.2 Written Submissions

Formal written submissions were accepted as part of this consultation from organizations and experts. These documents were submitted by email, in either Word or PDF format. Appropriate submissions (that met the guidelines listed online) were then posted on the DST engagement website.

Submissions were reviewed and analyzed for themes, and this qualitative feedback was incorporated into this report.

2.1.3 Consultation Period

The consultation period, during which feedback from both survey and written submissions were accepted, ran from June 24 to July 19, 2019. The survey closed at 4 pm PDT on July 19, 2019.

2.2 Analysis

GCPE contracted Malatest to undertake analysis of the feedback collected through the online survey. Written submissions were reviewed by MAG, and findings were summarized to Malatest for inclusion in this report.

The majority of responses to survey questions regarding DST observance were summarized quantitatively. Summary statistics were used to identify the overall level of support for a change to year-round DST observance, the reasons for respondents preferences, and the perceived importance of alignment with B.C.'s neighbouring jurisdictions. In addition, these items were cross-tabulated with demographic variables of interest (e.g., region, industry, occupation) to identify whether there were any sub-groups that may be particularly impacted by the change or whether there were any differences among sub-groups on these questions.

Two open-ended items were included in the survey, where respondents were able to provide a detailed "other" response as to why they were in favour of, or against, a change to year-round DST observance. These responses were then coded by Malatest according to a consistent coding framework. The coding framework was developed through an inductive coding method, where themes were identified as they emerged from a sample of 1,000 comments (for each open-ended item). The coding framework developed included both existing options within the survey (i.e., 'upcoding' to options that were available as closed-ended options within the survey) and new

codes to reflect themes identified in review of the initial sample of comments. The coding frameworks for both questions are included in **Appendix C**.

Survey data presented throughout this report are available in tabular format, in **Appendix D**. Within the body of the report, reporting focuses on highlights and trends as well as significant differences among sub-groups. For full survey result breakdowns, please refer to **Appendix D**.

2.3 Limitations

There are some limitations to the research that should be kept in mind while reading this report.

Firstly, the format of the engagement (an online survey and online email submissions) requires respondents to be Internet users. While B.C. has high rates of access to the Internet among its population, as of 2016 approximately 8% of British Columbians were not Internet users.⁵ To account for this portion of the population, the engagement process permitted individuals to share their opinions by phoning ServiceBC, or by downloading the feedback form and mailing it in.

Secondly, the voluntary nature of the survey, which required participants to be aware of the engagement and navigate to the website – rather than more passive approaches such as being reached by phone or email and asked to participate – may result in a self-selection bias where those who hold particularly strong views about the topic (whether for or against) are more likely to respond to the survey than those with neutral or no opinion. Due to the anonymous nature of the feedback, and the inability to conduct follow-up with those who chose not to participate, it is not possible to assess to what extent this may have impacted the survey results.

There were some limitations arising from the design of some survey questions as well. The first question in the survey asked respondents to indicate their preference of two options: maintaining the current system of changing the clocks twice a year, or moving to year-round Pacific Daylight Saving Time (DST). The option to move to year-round Pacific Standard Time (ST) was not offered on the survey. As a result, the survey did not capture the proportion of British Columbians whose first preference would be to observe ST year-round. Some respondents indicated this preference for ST year-round in the open-ended response sections of the survey; this is discussed in **Section 4.1.2**.

Another limitation stemming from the survey design relates to respondents' self-identified occupation. Respondents were asked to self-identify which of several categories best described their occupation. The response options for occupations were selected from the NOC system. There were also some response options that identified employment status, rather than occupation. These included "unemployed," "maternity leave," "student," and "homemaker" classifications. While these may represent one's current and/or main pursuit at the time of the survey, they are

⁵ Based on findings of the 2016 General Social Survey (Canadians at Work and Home) conducted by Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2017032-eng.htm>

not necessarily mutually exclusive of other response options listed in the question. For that reason, discussion of the representation of occupations, and cross-tabulations of responses by occupation, should be interpreted with caution.

SECTION 3: FINDINGS – PARTICIPANTS

3.1 Overall Response

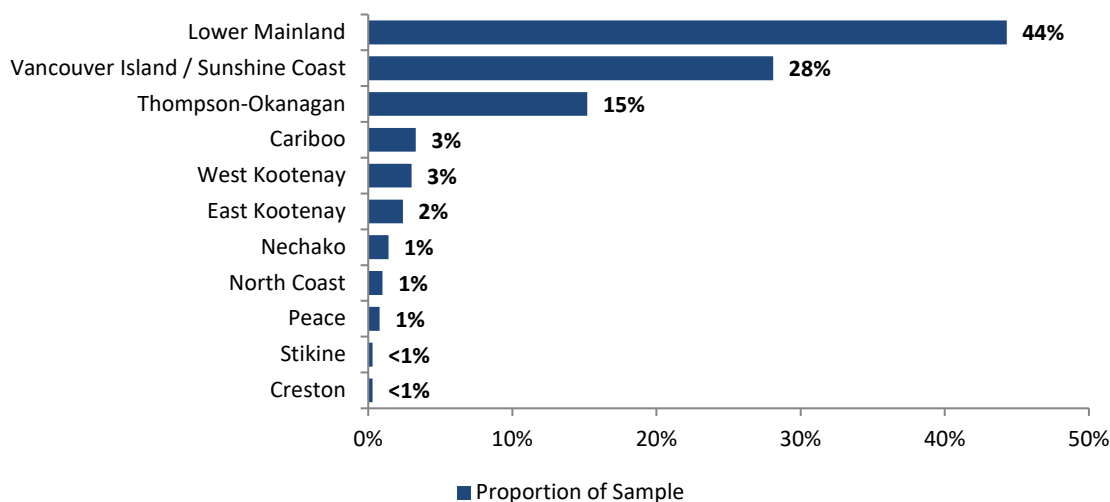
The public consultation on Daylight Saving Time in B.C. broke provincial records for the most responses to a public consultation initiative. The survey alone garnered 223,273 survey completions out of a total of 223,465 who started the survey (a 99.9% completion rate).

3.2 Demographic Breakdown of Respondents

3.2.1 Region

The survey sample was dominated by respondents from the Lower Mainland, Vancouver Island and Sunshine Coast, and Thompson-Okanagan regions. Together, these three regional groups represented nearly 88% of the entire sample. This is largely reflective of the distribution of population in B.C., although these regions are slightly over-represented.⁶ **Figure 3.1** illustrates the breakdown of survey responses across all regions captured in the survey.

Figure 3.1 Regional Breakdown of Survey Responses



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D4 in Appendix D.

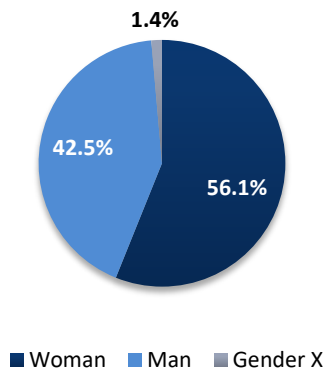
n=222,406. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

⁶ According to 2016 Census data, these three regions account for approximately 81% of B.C.'s total population.

3.2.2 Gender

Women were slightly over-represented in this survey sample, making up 56% of the survey sample; women represent approximately 51% of the total population of B.C. according to 2016 Census data. A full breakdown of gender responses in this survey is provided in **Figure 3.2** below.

Figure 3.2 Gender Breakdown of Survey Responses

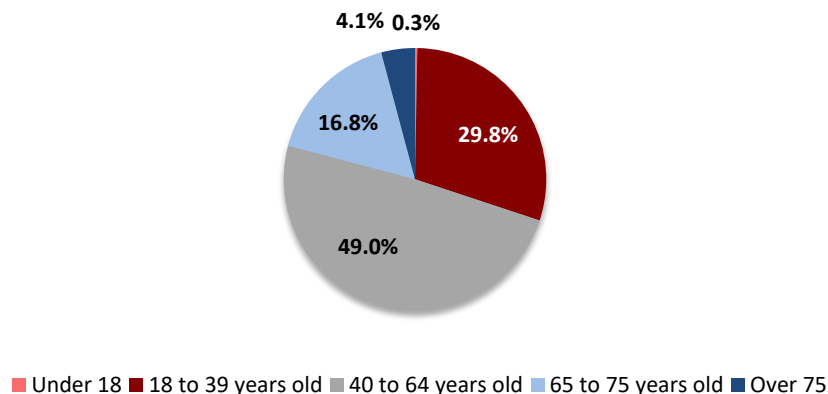


Source: B.C. GCPE's Daylight Saving Time Survey, 2019
For further information, please see Table D2 in Appendix D.
n=221,773

3.2.3 Age

Slightly less than one-half of survey respondents (49%) were aged 40 to 64 years old. The next-most-common age category was 18 to 39 years (30%). Those aged 65 and over represented 20% of all participants, while respondents under 18 represented less than 1% of respondents. A comparison of these proportions to population breakdown by age category from 2016 Census figures for British Columbia is provided in **Table 3.1**.

Figure 3.3 Age Breakdown of Survey Responses



Source: B.C. GCPE's Daylight Saving Time Survey, 2019
For further information, please see Table D5 in Appendix D.

n=222,088. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

Table 3.1 Comparison of Age Breakdown, Survey Sample to Population (2016 Census Count)

Age Category	Proportion of Survey Sample	Proportion of B.C. Population
Under 18	0.3%	18.1%
18 to 39	29.8%	28.1%
40 to 64	49.0%	35.5%
65 to 75	16.8%	11.2%
Over 75	4.1%	7.0%

Sources: B.C. GCPE's Daylight Saving Time Survey, 2019; Statistics Canada's Data Tables, 2016 Census (<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/dt-td/Rp-eng.cfm?TABID=2&LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GID=1164163&GK=0&GRP=1&PID=109526&PRID=10&PTYPE=109445&S=0&SHOWALL=0&SUB=0&Temporal=2016&THEME=115&VID=0&VNAMEE=&VNAMEF=&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0>)

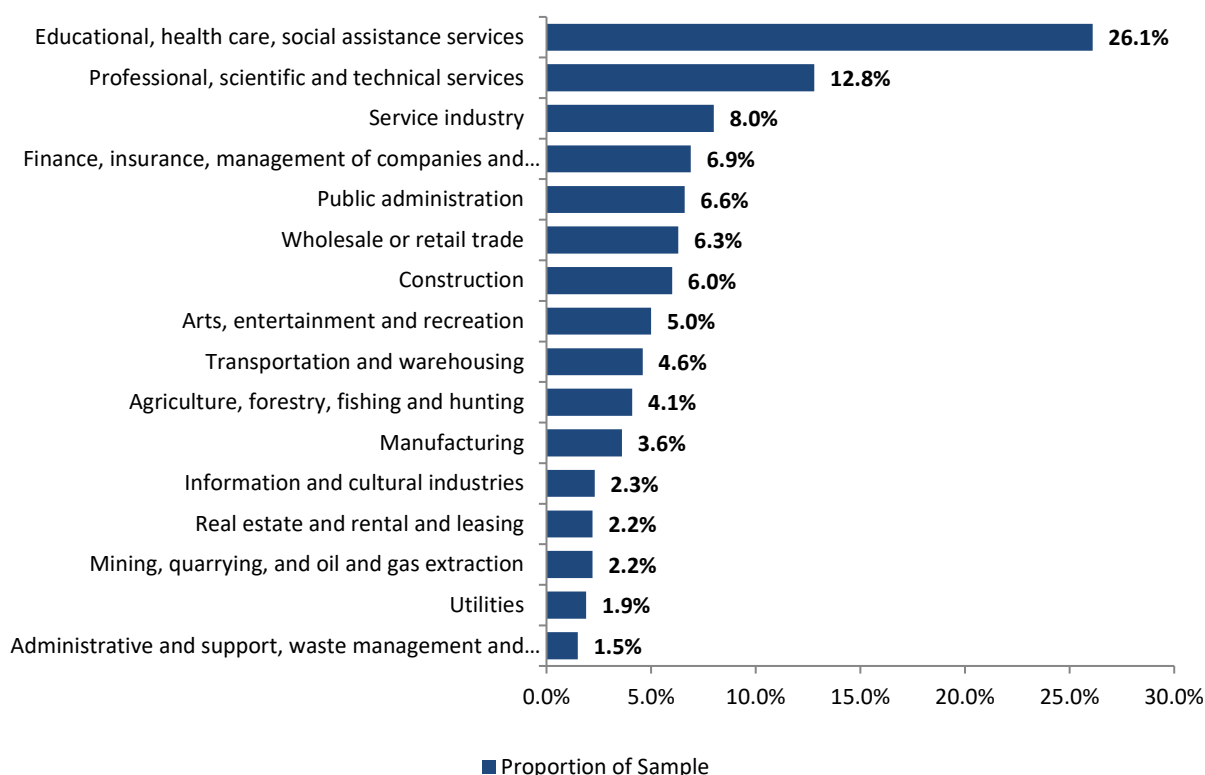
3.2.4 Indigenous Respondents

Respondents were asked whether they identify as Indigenous, and four per cent of the survey respondents did. Indigenous representation amongst survey respondents is lower than that of the B.C. population: according to 2016 Census figures, Indigenous people represent 6% of B.C.'s total population. For more information on Indigenous representation in the survey sample, please refer to Table D3 in **Appendix D**.

3.2.5 Industry and Occupation

Respondents were also asked to identify their industry and occupation **Figure 3.4** summarizes respondents' answers to this question. The most common industry that respondents reported was educational, health care, and social assistance services (26%) followed by professional, scientific, and technical services (13%). All other industries reported had less than 10% of respondents reporting that they worked in each of these industries.

Figure 3.4 Industry Breakdown of Survey Responses



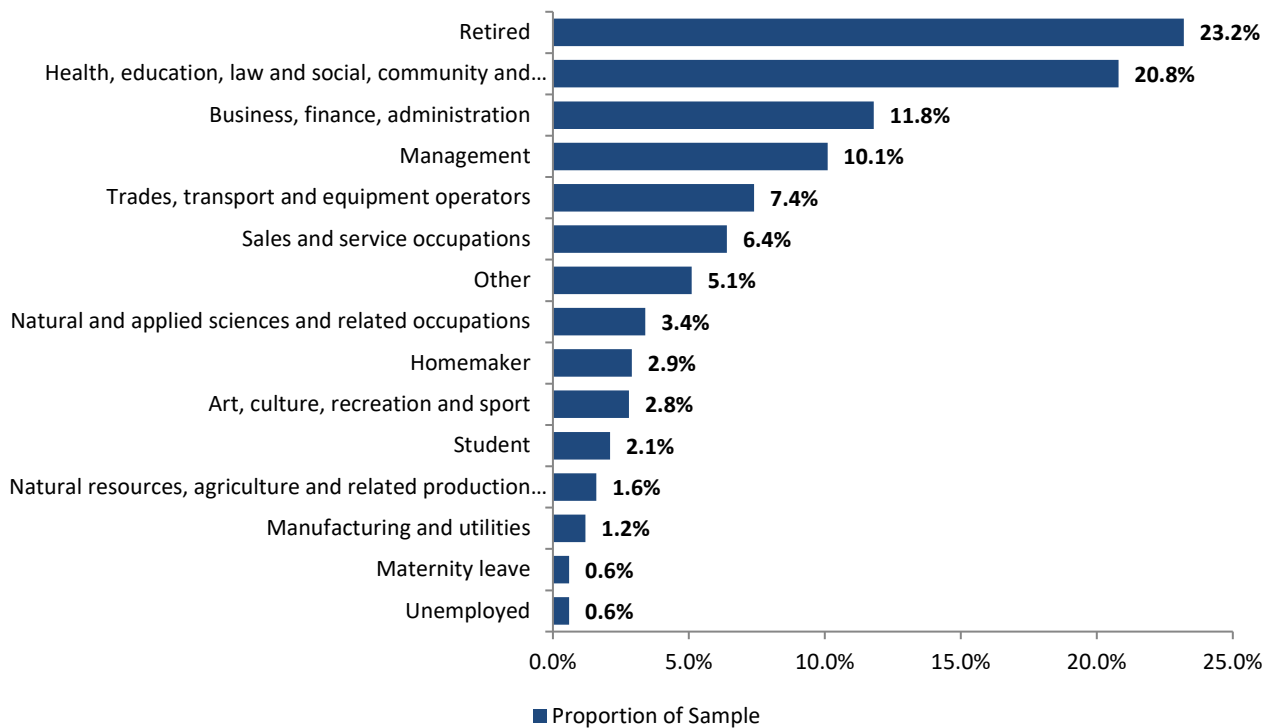
Source: B.C. GCPE's Daylight Saving Time Survey, 2019
For further information, please see Table D7 in Appendix D.
n=146,394⁷

Figure 3.5 provides a visual breakdown of survey respondents' self-reported occupations. The most common response was "retired," (23%) followed by "health, education, law and social, community and government services" (21%). It is important to note that the categories listed in this question are not mutually exclusive; some response options describe employment status (e.g., unemployed, maternity leave, student) rather than occupation. As such, these findings should be interpreted with caution.

Further, 5% of all respondents reported that their occupation was "other". These respondents then wrote in a description of their occupation. Due to time constraints in the reporting timelines, it was not possible to categorize these responses into the existing categories, and have been included as "other" in all analyses in this report.

⁷ Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions. A large number of missing responses to this question may be due to the fact that respondents who indicated that they are retired do not feel that they belong to or work in an industry any longer; approximately 51,500 respondents were retired, accounting for about two-thirds of missing responses to this question. It is also possible that respondents did not feel confident in their assessment of what industry their occupation fell into.

Figure 3.5 Occupation Breakdown of Survey Responses



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D6 in Appendix D.

n=222,213. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

SECTION 4: FINDINGS – ATTITUDES TOWARDS YEAR-ROUND DAYLIGHT SAVING TIME

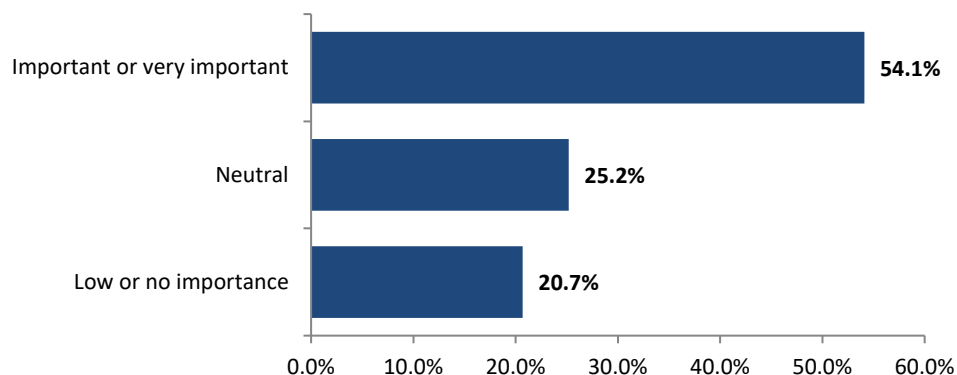
4.1 Overall Attitudes

4.1.1 Main Summary

A large majority of survey respondents (93%) reported being in favour of changing time observance in B.C. to year-round Daylight Saving Time. The remaining 7% of respondents preferred remaining with the current system of bi-annual clock changes.^{8,9}

A small majority of respondents (54.1%) believe that it is important or very important for B.C. to be aligned with neighbouring provinces, territories and states.

Figure 4.1 Respondent-Rated Importance for B.C. to Align with Neighbouring Jurisdictions



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D13 in Appendix D.

n=223,666. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

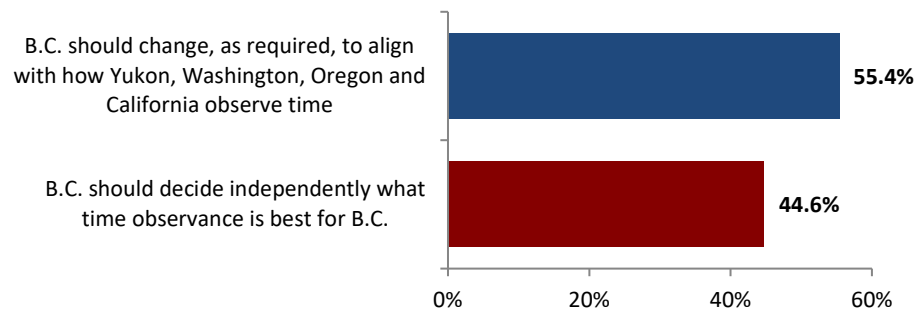
Respondents were also asked whether B.C. should make decisions regarding time observance independently or move to align with the decisions of the three states on the Pacific Coast (Washington, Oregon, and California). Slightly more than one-half of respondents (55%) believed that B.C. should align with these states, while the remainder (45%) believed that B.C. should make its own decision.¹⁰

⁸ It should be noted that a third option, changing to year-round observance of Standard Time, was not included in the survey. It is not possible to estimate to what extent survey respondents would have selected a year-round ST option had it been made available on the survey. Further analysis on the prevalence of this attitude among respondents are provided in **Section 4.1.2**.

⁹ Item n=223,465. For more information on responses to this survey item, please see Table D8 in **Appendix D**.

¹⁰ Item n=223,465. For more information on responses to this survey item, please see Table D14 in **Appendix D**.

Figure 4.2 Opinion on Best Course of Action for B.C.



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D14 in Appendix D.

n=223,465. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

4.1.2 Reasons for Preferences

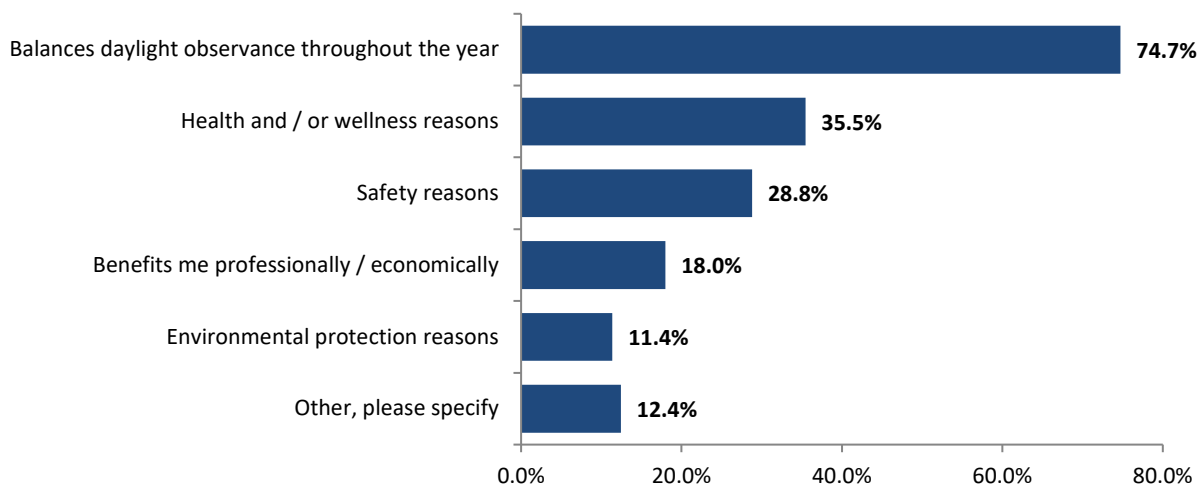
Respondents were asked to provide reasons for their preferences (whether they preferred continuing to observe the bi-annual time change or would support a move to year-round DST). These survey questions included a number of pre-populated response options (i.e., closed-ended response options), as well as the option to select "Other, please specify" and write in their own answer. Closed-ended response options to these questions were not mutually exclusive; respondents could select as many as they felt applied. In some cases, open-ended response options were upcoded to pre-existing closed-ended response options. Some cases therefore had the same closed-ended code applied twice.

Reasons for Preferring Bi-Annual Time Change

Pre-populated responses

Among those who reported that they preferred to retain the bi-annual time change, the most common reason given was that it balances daylight observance throughout the year. Other response options received considerably less support from respondents. **Figure 4.3** below summarizes these responses.

Figure 4.3 Reasons for Preferring Bi-Annual Time Change*



* Proportions were calculated based on the total number of respondents who indicated a preference for the bi-annual time change. Proportions add to more than 100% due to multiple responses.

Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D9 in Appendix D.

n=15,641. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

Open-ended responses

Of respondents who preferred the bi-annual time change, 1,946 individuals wrote in an "Other, please specify" response. Due to the high volume of open-ended responses (including both this question and the comparable question for those who preferred year-round DST), a 25% sample of all open-ended comments to this question was taken (randomly selected within region stratifications) and coded thematically. **Figure 4.4** below summarizes the themes identified through this coding and the proportion of comments to which each code applied.

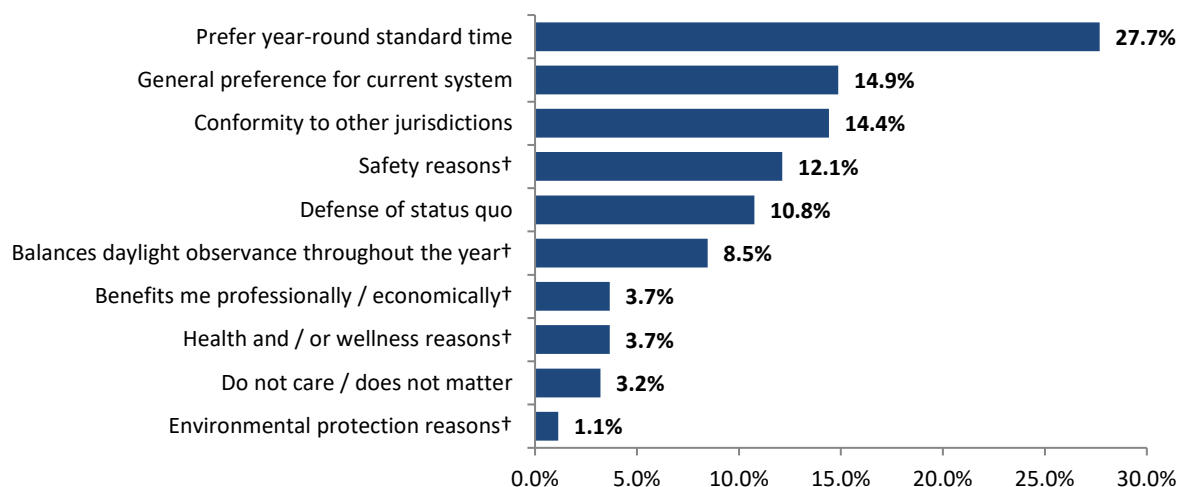
Notably, the most common sentiment identified in the open-ended responses from participants who preferred to remain with the bi-annual time change was that they actually did not support the bi-annual time change, and would prefer changing to year-round observance of Standard Time. In the absence of that option, however, continuing with the bi-annual time change was preferable to year-round DST observance.

It is not possible to estimate to what extent survey respondents would have selected a year-round ST option, had it been made available on the survey. Although only a small proportion of all respondents addressed this issue through their open-ended comments (approximately 3%, when accounting for the fact that 12% of respondents provided any open-ended comment to this question), there may have been other respondents with similar views who did not address this concern through the open-ended comments section.

Other common reasons for preferring the bi-annual time change that were expressed in the "Other, please specify" section, included a general preference for the current system of bi-annual

time changes (15%), alignment with other jurisdictions (14%), safety reasons (12%), and a general defense of the status quo (11%). Other themes identified received less than 10% support from respondents.

Figure 4.4 Themes Emerging from Comments on Preference for the Bi-Annual Time Change



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D10 in Appendix D.

n=437

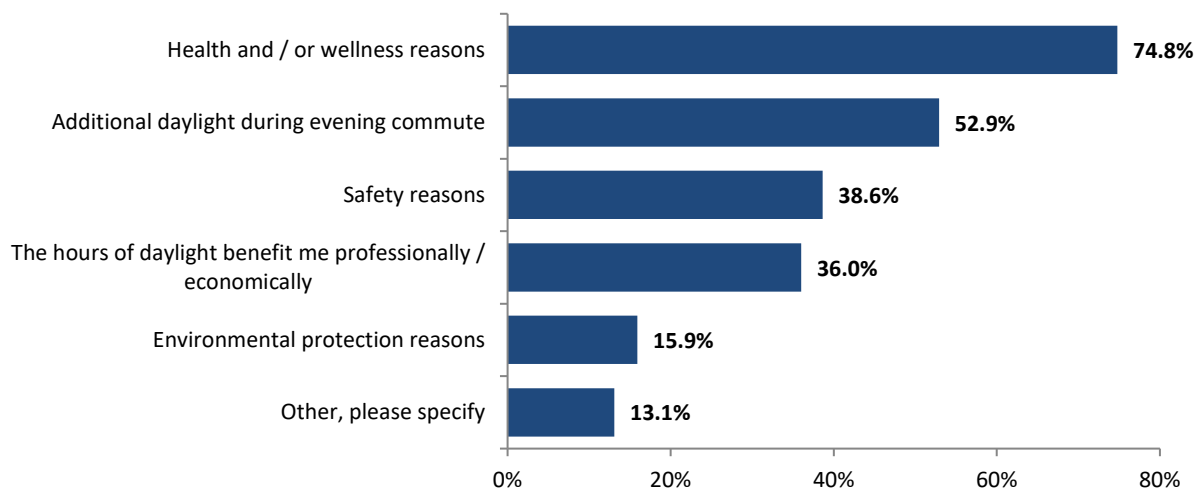
† These options were included in the list of closed-ended response options; comments coded with these codes reiterated sentiments or thoughts that aligned with these reasons, and therefore were 'upcoded' to existing codes.

Reasons for Preferring Year-Round Observance of DST

Pre-populated responses

Among respondents who reported preferring year-round observance of DST (n=207,824), the most common reason for this preference was "health and / or wellness reasons" (75% of all respondents). Respondents could select as many response options as they felt applied. **Figure 4.5** below summarizes the closed-ended response options selected by respondents.

Figure 4.5 Reasons for Preferring Year-Round DST Observance



* Proportions were calculated based on the total number of respondents who indicated a preference for year-round DST. Proportions add to more than 100% due to multiple responses.

Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D11 in Appendix D.

n=207,824. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

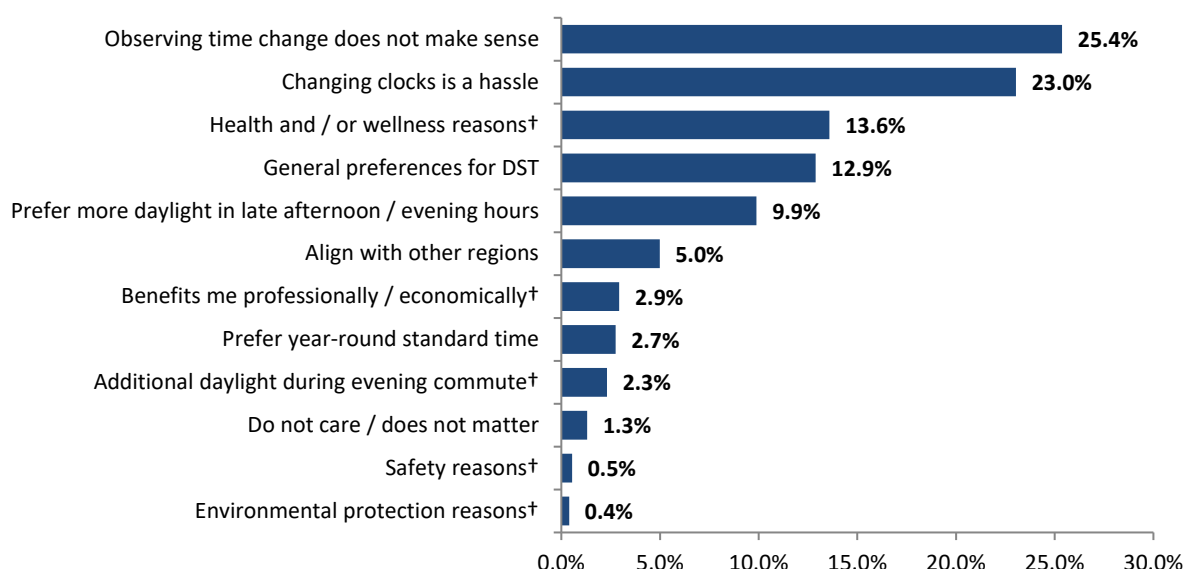
Open-ended responses

In total, 27,234 respondents provided comment on this survey item through the "Other, please specify" response option. As with the question regarding preference for the bi-annual time change, a 25% random sample, stratified by region, was taken from these comments for thematic coding. **Figure 4.6** summarizes the themes identified through this coding.

The most commonly identified themes in respondents' open-ended answers, among those who indicated a preference for year-round DST observance, were that observing the time change does not make sense in a modern context, and that changing clocks is a needless hassle twice per year. The other reasons provided by respondents are illustrated in **Figure 4.6** below.

It is important to note that approximately 3% of the respondents who provide open-ended comments for why they selected the survey option "BC should adopt year-round DST" indicated that they would have selected year-round ST as their first preference if it had been an option. As before, this should not be taken as indicative of the total proportion of respondents who would prefer year-round ST in B.C. It is possible that more respondents would have selected this option from a closed-ended list, had the option been available.

Figure 4.6 Themes Emerging from Comments on Preference for Year-Round DST



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information, please see Table D12 in Appendix D.

n=6,843

† These options were included in the list of closed-ended response options; comments coded with these codes reiterated sentiments or thoughts that aligned with these reasons, and therefore were 'upcoded' to existing codes.

4.2 Comparisons by Demographic Factors of Interest

Comparisons of attitudes towards a change to year-round DST observance was undertaken based on several demographic factors collected in the survey. Full breakdowns of these comparisons can be found in Tables D15 through D18 in **Appendix D**. However, interpretation of findings should be undertaken with caution, for two main reasons.

First, given that a very large majority of all respondents selected one response option (preference for year-round DST), rates of preference for this option remain high across all levels, in all demographic factors of interest. In practical terms, a considerable majority of respondents from across all backgrounds prefer year-round DST.

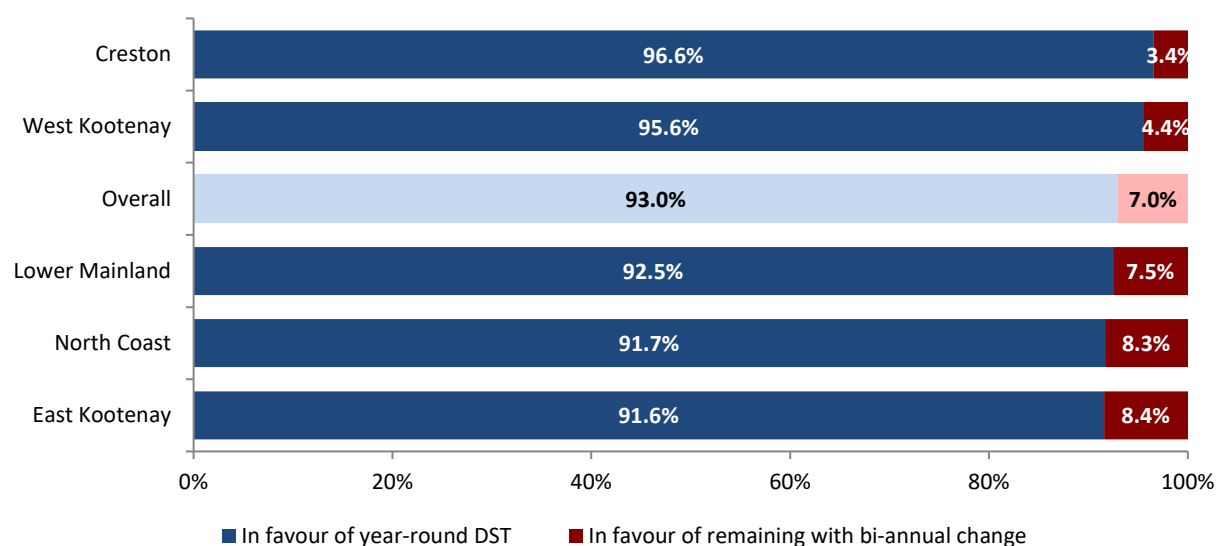
Second, given the very high number of responses to this survey, and the large number of sub-groups on certain demographic items such as region and industry, even small differences between demographic sub-groups become statistically significant. In the interests of highlighting major trends and differences among sub-groups, analysis within this report focuses on sub-groups that differed from most others in that demographic grouping.

4.2.1 Region

Eleven regions were captured in the survey, and comparisons were made among these regions to identify areas that had significantly different attitudes towards a change to year-round DST observance.

Across all regions of the province, respondents' support for year-round DST was over 90% and there was little difference in levels of support between the regions. **Figure 4.7** summarizes support for change to year-round DST among selected regions that differed the most. Respondents from the Creston and West Kootenay regions were most likely to support a change to year-round DST.

Figure 4.7 Support for Change to Year-Round DST, among Selected Regions

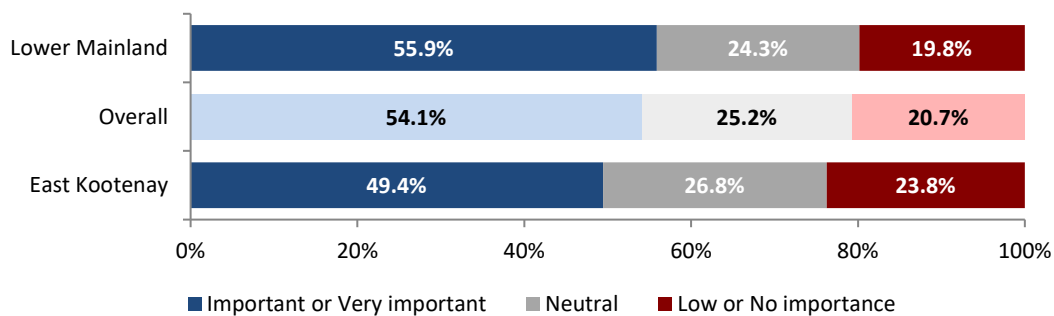


Source: B.C. GCPE's Daylight Saving Time Survey, 2019

Please note that this figure includes only those regions that differed significantly from most other regions. For further information, including proportional support among all regions, please see Table D15 in Appendix D. n=221,395. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

Respondents from the Lower Mainland were significantly more likely than those from most other regions to rate alignment with neighbouring jurisdictions as "important" or "very important". Respondents from the East Kootenay region, in contrast, were significantly more likely to rate this as "low importance" or "not important". **Figure 4.8** illustrates the breakdown of attitudes among these regions. As with the previous comparisons among regions for DST preference, it is important to note that even small differences among regions can be statistically significant, and overall about half of British Columbians across all regions believe that it is important for B.C. to align with neighbouring regions, while between 20% and 25% believe it is not important.

Figure 4.8 Importance of Alignment with Neighbouring Jurisdictions, among Selected Regions



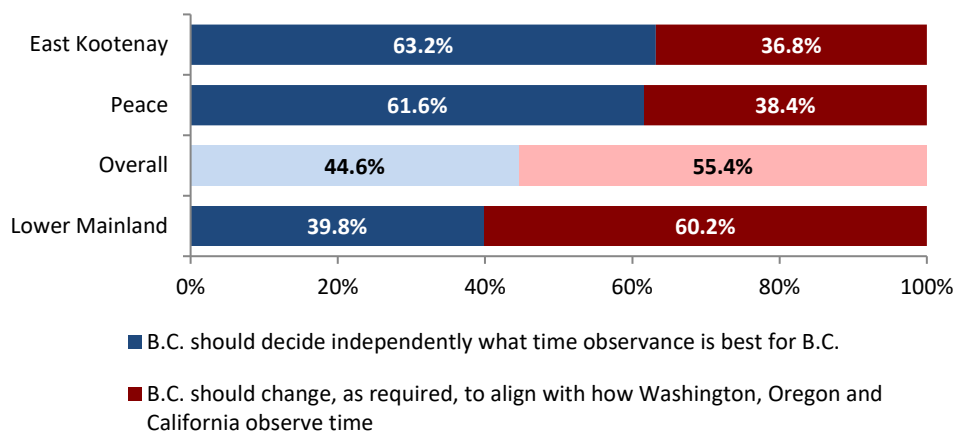
Source: B.C. GCPE's Daylight Saving Time Survey, 2019

Please note that this figure includes only those regions that differed significantly from most other regions. For further information, including proportional support among all regions, please see Table D15 in Appendix D.

n=221,677. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

Finally, comparisons among regions were done for responses to the question regarding how B.C. should proceed if Washington, Oregon, and California implement year-round DST observance. Respondents from the East Kootenay and Peace regions were significantly more likely to believe that B.C. should make a decision independently, while those from the Lower Mainland were significantly more likely to believe that B.C. should change its time observance to align with these states.

Figure 4.9 Opinion on Best Course of Action for B.C., among Selected Regions



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

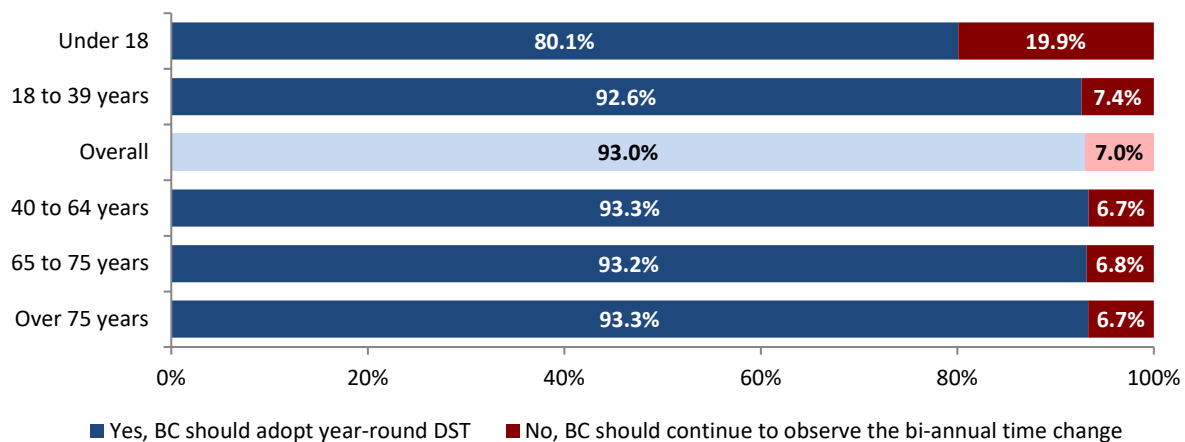
Please note that this figure includes only those regions that differed significantly from most other regions. For further information, including proportional support among all regions, please see Table D15 in Appendix D.

n=221,518. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

4.2.2 Age

Respondents under 18 years old were significantly more likely to report that B.C. should remain with the current system of a bi-annual time change, while there were no major trends or differences that emerged among other age groups. Approximately 20% of all respondents under 18 years of age reported favouring the bi-annual time change, compared to 7% support for this option among all respondents. This is illustrated below in **Figure 4.10**.

Figure 4.10 Support for Change to Year-Round DST, by Age Category



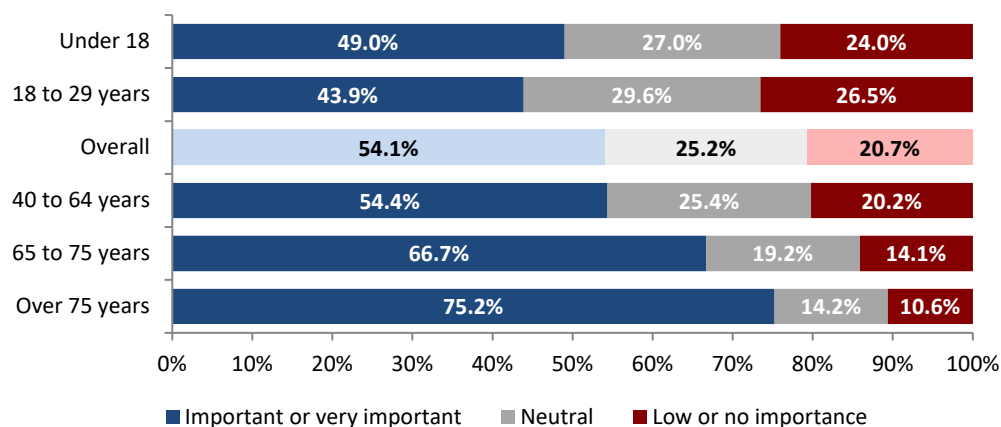
Source: B.C. GCPE's Daylight Saving Time Survey, 2019

For further information please see Table D16 in Appendix D.

n=221,094. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

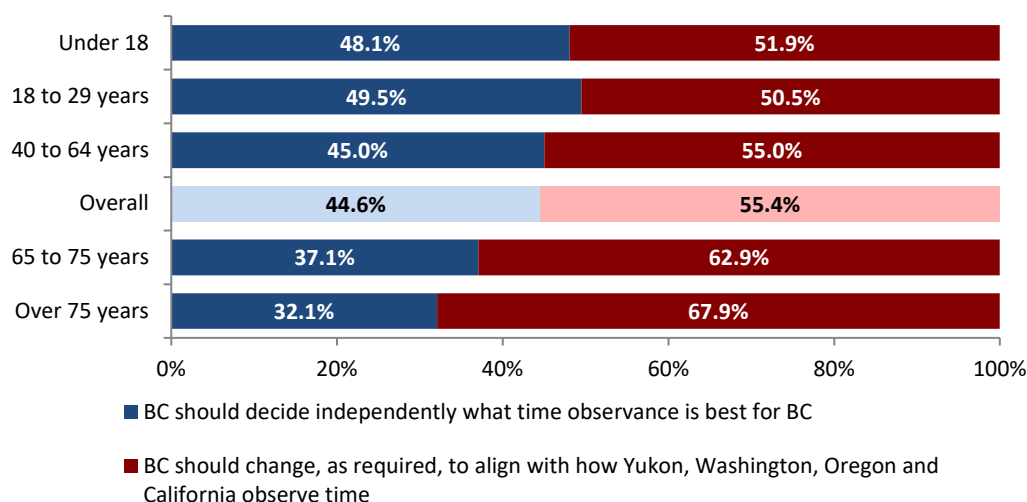
Attitudes towards alignment on time observance tended to correlate with age, with older respondents being more likely to believe it is important for B.C. to align with its neighbours, and to take action based on the decisions of Washington, Oregon, and California. **Figures 4.11 and 4.12** illustrate these findings.

Figure 4.11 Importance of Alignment with Neighbouring Jurisdictions, by Age Category



Source: B.C. GCPE's Daylight Saving Time Survey, 2019
 For further information please see Table D16 in Appendix D.
 n=221,359. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

Figure 4.12 Opinion on Best Course of Action for B.C., by Age Category



Source: B.C. GCPE's Daylight Saving Time Survey, 2019
 For further information please see Table D16 in Appendix D.
 n=221,207. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

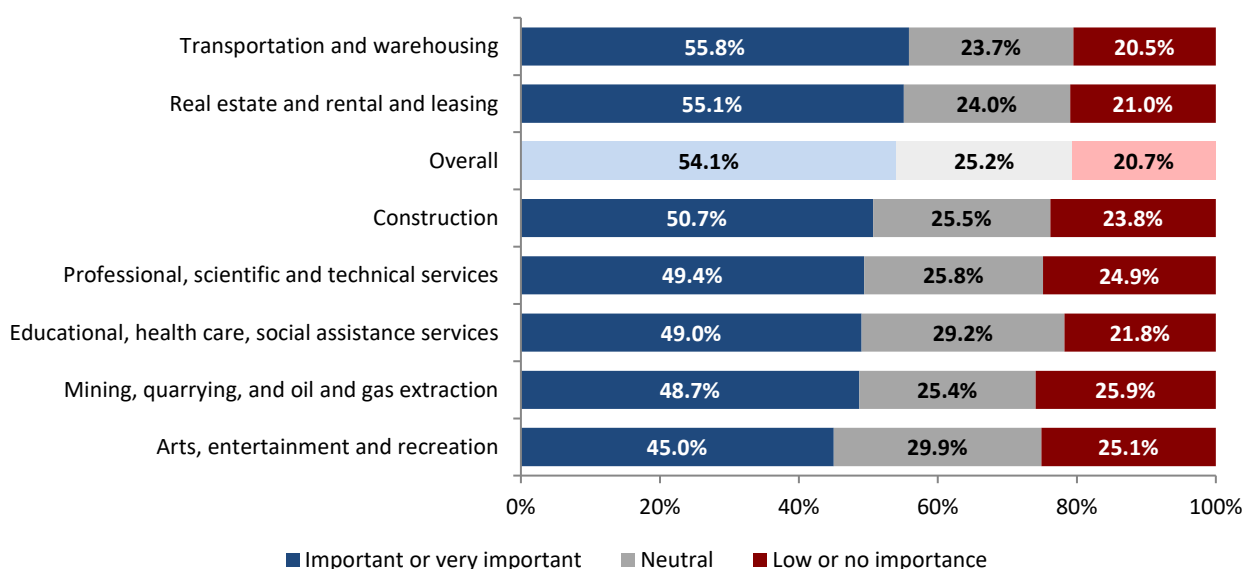
4.2.3 Industry

There were no large or particularly notable differences in support for moving to year-round DST by industry, with the exception of construction. Respondents from the construction industry were significantly more likely than most other groups to prefer remaining with the current system of bi-annual time changes, with 8% of respondents in the construction industry preferring this option.¹¹

Respondents in a number of industries were significantly less likely to report that it was important or very important for B.C. to be aligned with neighbouring jurisdictions. This is illustrated in **Figure 4.13** below.

¹¹ Item n=145,904. For more information on the breakdown of support for year-round DST by industry, please refer to Table D17 in Appendix D.

Figure 4.13 Importance of Aligning with Neighbouring Jurisdictions, among Selected Industries



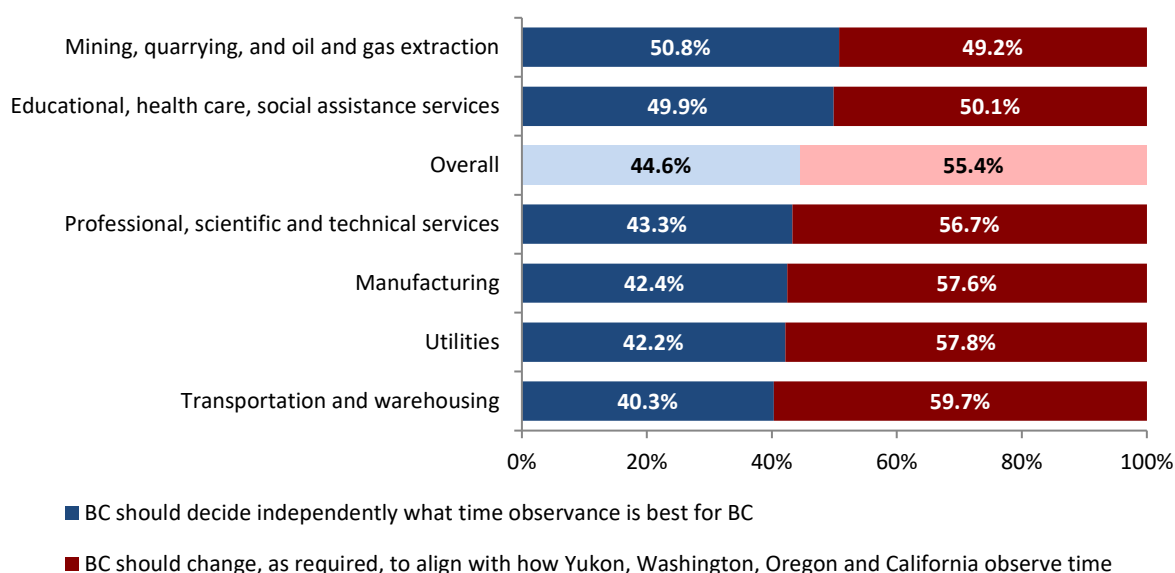
Source: B.C. GCPE's Daylight Saving Time Survey, 2019

Please note that this figure includes only those industries that differed significantly from a large number of other industries. For further information please see Table D17 in Appendix D.

n=145,987. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

As represented in **Figure 4.14**, respondents from the mining, quarrying, and oil and gas extraction industry as well as from the educational, health care, and social assistance services industry were both significantly more likely than respondents from other regions to believe that B.C. should make its own decision on time observance. In contrast, those in professional, scientific and technical services, manufacturing, utilities, and transportation and warehousing industries were more likely to support B.C. changing its time observance to align with Washington, Oregon, and California.

Figure 4.14 Opinion on Best Course of Action for B.C., among Selected Industries



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

Please note that this figure includes only those industries that differed significantly from a large number of other industries. For further information please see Table D17 in Appendix D.

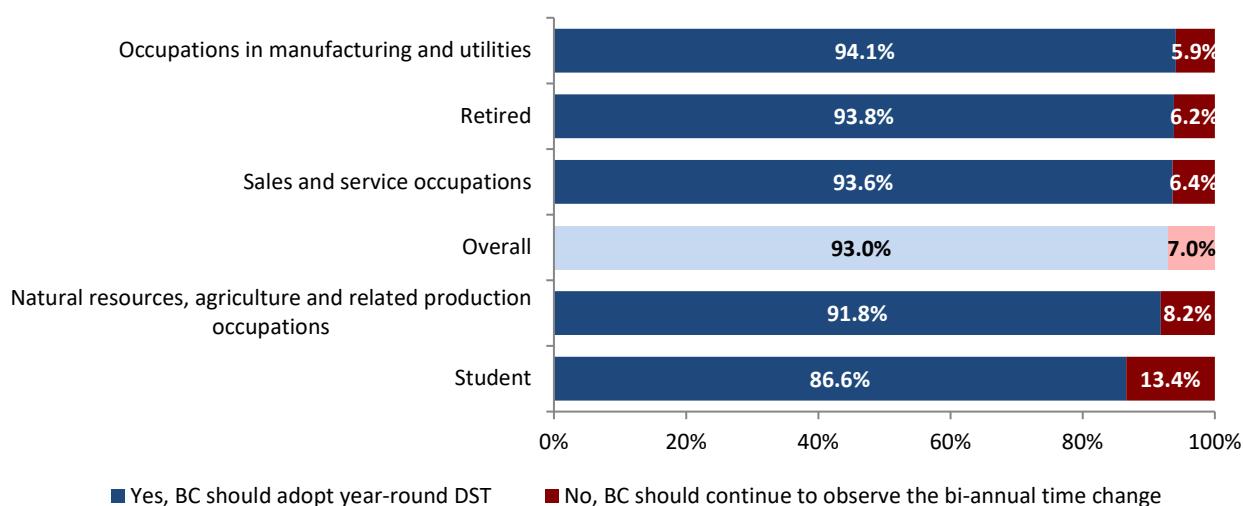
n=146,036. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

4.2.4 Occupation

As mentioned previously in **Section 3.2.5**, findings on respondents' self-reported occupations should be interpreted with caution. Due to the design of the question, some categories are not mutually exclusive and the survey data may not be a completely accurate reflection of the breakdown of respondents' occupations.

Those who identified as working in manufacturing and utilities, sales and service jobs, and retirees were significantly more likely to support a change to year-round DST than most other occupational groups; however, as shown in **Figure 4.15**, these differences were small in practical terms. Those working in natural resources, agriculture and related production occupations were less likely than most other groups to support year-round DST, as were students.

Figure 4.15 Support for Change to Year-Round DST, among Selected Occupational Groups



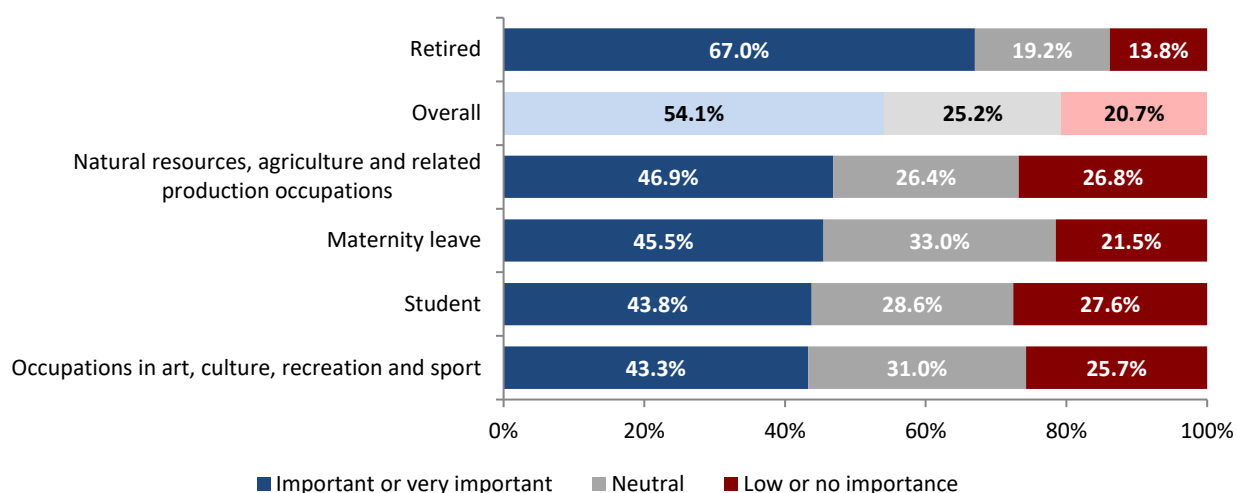
Source: B.C. GCPE's Daylight Saving Time Survey, 2019

Please note that this figure includes only those industries that differed significantly from a large number of other industries. For further information please see Table D18 in Appendix D.

n=221,214. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

Retirees were significantly more likely than all other groups to rate alignment with neighbouring jurisdictions as important or very important. Two-thirds of respondents who reported being retired rated this item as important or very important, compared to approximately half or slightly less among all other occupational categories.

Figure 4.16 Importance of Aligning with Neighbouring Jurisdictions, among Selected Occupational Categories



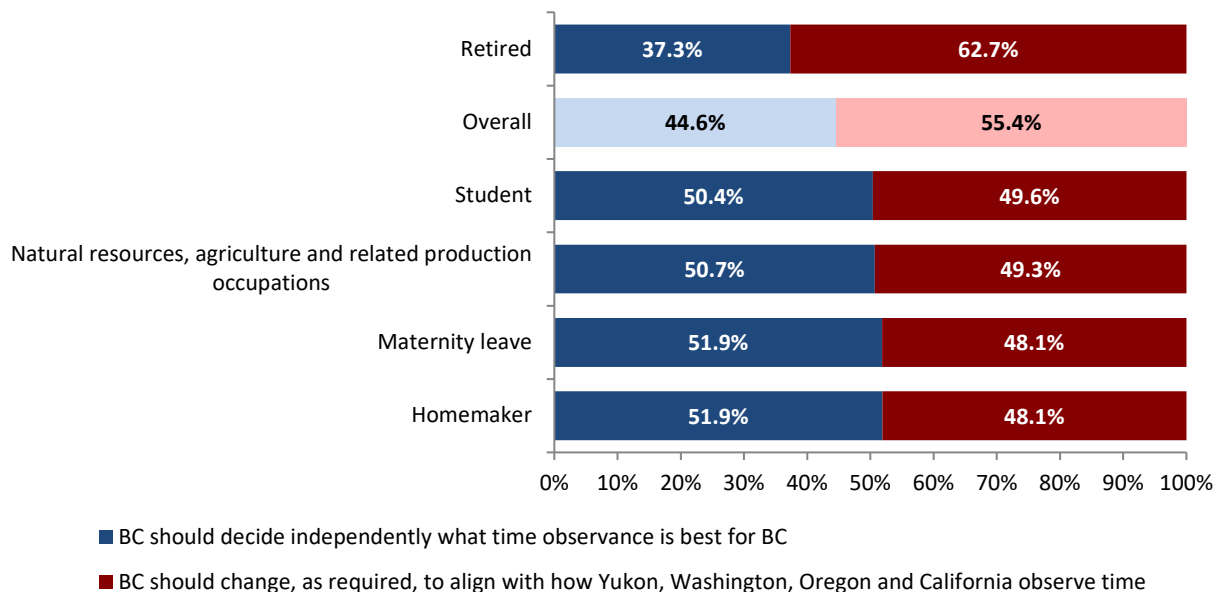
Source: B.C. GCPE's Daylight Saving Time Survey, 2019

Please note that this figure includes only those industries that differed significantly from a large number of other industries. For further information please see Table D18 in Appendix D.

n=221,496. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

Similarly, retirees were significantly more likely to believe that B.C. should make a decision on time observance based on the actions of Washington, Oregon, and California. Most other occupational groups –including those that differed significantly from a large number of other groups – were more supportive of B.C. making its own decision on time observance.

Figure 4.17 Opinion on Best Course of Action for B.C., among Selected Occupational Categories



Source: B.C. GCPE's Daylight Saving Time Survey, 2019

Please note that this figure includes only those industries that differed significantly from a large number of other industries. For further information please see Table D18 in Appendix D.

n=221,351. Cited *ns* in tables and graphs throughout this document vary due to respondents skipping questions.

SECTION 5: RESPONSES FROM WRITTEN SUBMISSIONS

The Daylight Saving Time engagement invited experts and organizations to provide written submissions to share their views on whether British Columbia should continue to observe the bi-annual time change and how important it is that B.C. aligns with neighbouring provinces, territories and states.

The engagement received fifteen formal submissions from:

- B.C. Chamber of Commerce
- British Columbia Golf
- Canada West Ski Areas Association
- Arthur L. Close
- District of Fort St. James
- Donetta Faye Cooper
- Island Medical Health Officers
- Myriam Juda, Ph.D (Society for Research on Biological Rhythms)
- Jean-Pierre Moreau (Member of the Scientific Board for the French Association ACHED)
- Kamloops Chambers of Commerce
- Rabbinical Council of America
- Save Standard Time
- Stop the Time Change in B.C.
- Vancouver Airport Authority
- Village of Burns Lake

The submissions may be viewed on the public engagement site at <https://engage.gov.bc.ca/daylightsavingtime/stakeholder-submissions/>.

5.1 Preference for Bi-Annual Time Change or Year-Round Observance of DST

Canada West Ski Areas Association and B.C. Golf indicated that their preference is to continue the practice of “falling back” to Standard Time (ST) in the winter and “springing ahead” to Daylight Saving Time (DST) during the summer months. Reasons for preferring the status quo included economic considerations, sunrise and sunset times, health concerns, and industry-specific safety and operational concerns. However, if a change to status quo were to occur, B.C. Golf indicated a preference for the province to observe year-round DST and Canada West Ski Areas Association preferred year-round ST.

Ten submissions expressed a preference for discontinuing the bi-annual time change. Commonly cited reasons included workplace accidents, traffic accidents, sleep loss, and other health considerations. Six of these submissions preferred remaining on year-round DST, and four preferred year-round ST. Submissions endorsing year-round DST cited environmental impacts, industry considerations, workplace and traffic safety, and health considerations as reasons for favoring DST.

Critics of DST raised several reasons for preferring ST, including economic costs and industry considerations; health concerns; workplace and traffic safety; productivity; environmental impact; and natural biological rhythms. The Rabbinical Council of America wrote to oppose year-round DST on the basis of religious freedoms, stating that DST year-round would infringe upon the Jewish community's ability to attend daily prayers.

5.2 Alignment with Other Jurisdictions

Five submissions (from B.C. Chamber of Commerce, B.C. Golf, Canada West Ski Areas Association, Kamloops Chamber of Commerce, and Vancouver Airport Authority) highlighted the importance of aligning with other jurisdictions. Canada West Ski Areas Association and Vancouver Airport Authority encouraged further engagement with federal counterparts to align time observance across North America. Preserving the competitiveness of B.C.'s industries and avoiding confusion were cited as the primary reasons for prioritizing alignment with other jurisdictions.

The remaining ten submissions did not indicate whether alignment with other jurisdictions was a priority for them.

5.3 Other Issues Raised

In addition to input on alignment with other jurisdictions and whether to continue the current practice of changing clocks bi-annually, two submissions raised other issues.

A submission by Island Medical Health Officers suggested the need for a health-focused review to assist policy-makers when examining future impacts of time observance on the B.C. population. Another submission recommended an examination of the provinces' constitutional jurisdiction to legislate the observance of time.

5.4 Emails Received from Private Citizens

GCPE, which hosted the online public engagement to provide British Columbians, received 279 emails from private citizens in B.C. regarding their opinions on the topic of B.C. changing to year-round DST. Several themes were identified in these emails, as summarized below.

5.4.1 Concerns about the Survey Itself

Several comments identified the lack of a year-round ST option as a shortfall of the survey. Some of these comments explicitly indicated that they would have selected that option if it were available, while others simply identified this as a problem with the structure of the survey.

Additionally, there were a small number of comments that raised concerns about the cost of the public consultation.

5.4.2 Concerns for Specific Groups of People

Some comments identified concerns about the impact of daylight observance hours on specific groups of people. Four comments identified children as a group of concern; all of these comments indicated that a change to year-round DST would be detrimental to this group due to safety issues during morning trips to school in the winter, or the impact of late sunsets on children's bedtimes in the summer.

Two comments noted seniors as an interest group in this discussion. Both these comments supported a year-round time observance, although they did not specify a preference between DST and ST. Both these comments noted that the time change is difficult to manage and to adjust to.

5.4.3 Influence of the United States

Ten comments raised concerns about the influence of the United States in considerations of time observance changes in B.C. All of these comments indicated that B.C. should not make changes to its preferred time observance based on changes made by Washington, Oregon and/or California. These comments advocated B.C. making its own decision about time observance, based on what best suits the needs and preferences for British Columbians.

5.4.4 Alignment with Canadian Jurisdictions

Ten comments called for consideration of alignment with other Canadian jurisdictions, including jurisdictions outside of B.C. (four comments) and regions or towns within B.C. that observe different daylight hours than the majority of the province (six comments).

5.4.5 Health and Safety Issues

Six comments raised concerns about health (three comments) and traffic safety (three comments). Health-related comments identified the physical and mental health impacts of disruptions to sleep schedules. Two of the comments on traffic safety believed that year-round DST would increase traffic risk during morning commutes in winter months, while the third identified the issue of sleep disruption and its impact on vehicle accidents as a reason to move to year-round DST.

SECTION 6: CONCLUSIONS

What is the overall attitude of British Columbians towards switching to year-round Daylight Saving Time?

A large majority of respondents favour a change to year-round observance of Daylight Saving Time: 93% favour such a change, compared to 7% who are opposed to it.

Although the survey did not offer a change to year-round observance of ST, this issue was raised in some of the comments in the open-ended field when respondents were asked to explain one they preferred one option over the other. Given that only approximately 13% of all respondents provided an open-ended comment on this section of the survey, however, it is not possible to estimate what the prevalence of this preference (year-round ST as a first choice) among all respondents would have been if it had been offered as a choice in the closed-ended responses.

What reasons were given by those in favour of switching to year-round Daylight Saving Time?

Respondents were able to choose as many closed-ended options as they felt represented their reasons for preferring year-round DST. As a result, the percentage of responses adds to more than 100%. Three-quarters of respondents who favoured year-round DST observance cited health and wellness concerns as a reason for this support. A further one-half of these respondents identified "additional daylight during evening commute" as a major reason for supporting year-round DST. Other popular reasons included "safety reasons" (38% of respondents supportive of year-round DST) and that the change would benefit them economically or professionally (36%).

What reasons were given by those against the switch to year-round Daylight Saving Time?

The most common reason for supporting the bi-annual time change was that it balances daylight observance throughout the year – this reason was chosen by 75% of all respondents who preferred retaining the bi-annual time change. Health and wellness reasons were also identified by slightly more than one-third of respondents who preferred the bi-annual time change.

Will any groups be particularly adversely impacted by the change?

Findings from the open-ended comments, and comparisons of different demographic groups, did not identify any major trends that would suggest some groups may be particularly adversely impacted by the change. Among nearly all demographic sub-groups, support for a change to year-round DST observance was 90% or higher.

Submissions from tourism operators associations (Canada West Ski Areas Association, and B.C. Golf) indicated that the current practice of bi-annual time changes should be retained for economic reasons, health concerns, and industry-specific safety and operational concerns. The Rabbinical Council of America identified concerns that year-round DST would interfere with the observance of Jewish morning prayers in winter months, when sunrise would occur during normal

business hours. However, a few individuals indicated in their open-ended responses that year-round DST would assist them in returning home by sunset on the Sabbath during winter months.

Will any groups particularly benefit from the change?

There were no major differences among demographic sub-groups in response patterns. A large majority of respondents in sub-groups, across all demographic factors, favoured a change to year-round DST observance.

While benefits to ending the bi-annual time change were identified, and some formal submissions also identified benefits to year-round DST such as environmental considerations, workplace and traffic safety, and other reasons, there were no specific groups identified in the submissions that would particularly benefit from a change to year-round DST observance. It was expected that these benefits would be experienced by most British Columbians.

Why is it important to align with other jurisdictions?

Five submissions from industry stakeholder groups identified the issue of alignment with other jurisdictions. The main reasons for alignment with other jurisdictions given were preserving the competitiveness of B.C.'s industries, and avoiding confusion. Canada West Ski Areas Association and Vancouver Airport Authority encouraged further engagement with federal authorities to align time observance across North America.

APPENDIX A: SURVEY BACKGROUNDER

Daylight Saving Time – Engagement Site Content – June 20, 2019

Home

British Columbians are invited to share their views on how we should observe time in our province. Most areas of B.C. currently “spring forward” into Daylight Saving Time during summer months and “fall back” to Standard Time in the winter.

The following choices are being considered:

1. B.C. continues the practice of changing our clocks bi-annually; or
2. B.C. adopts year-round observance of Daylight Saving Time.

Legislators in California, Oregon and Washington have proposed bills to end the bi-annual time change and observe Daylight Saving Time year-round. Premier John Horgan has reached out to the Governors of these states as well as to the Premier of Yukon, to hear their opinions and help inform the discussion in B.C.

The public engagement period will run from June 24, 2019 to July 19, 2019 at 4:00 p.m. During this time, interested individuals and organizations will be invited to share their opinions in the following ways:

- Individuals may complete the [online survey](#).
- Experts and organizations may provide formal submissions via email to citizenengagement@gov.bc.ca. Please read the [guidelines for formal submissions](#).

Feedback collected through this engagement will be weighed alongside decisions adopted by neighbouring jurisdictions to help government determine the best course of action for B.C. A final decision is expected to be announced in the fall of 2019.

Time Observance in British Columbia

Daylight Saving Time was implemented in Canada in 1915 to reduce coal consumption and to extend daylight hours for factory work to aid in the war effort. Since 1945, legislating Daylight Saving Time has been left to the provinces. In 1952, 54% of British Columbians voted in favour of a plebiscite (a direct public vote) to introduce Daylight Saving Time.

Since the late 1960s, DST observance in Canada has been closely or completely synchronized with the United States. Most jurisdictions in Canada and the U.S. move their clocks ahead (“spring forward”) by one hour on the second Sunday in March, and “fall back” by one hour on the first Sunday in November.

Some communities in the northeast and southeast regions of the province have adopted Mountain Standard Time (or Mountain Daylight Time) to align with Alberta for all or part of the year.

The last time B.C. conducted a public consultation on Daylight Saving Time was in 2007 and resulted in over 4,000 responses. The vast majority of respondents (92%) were in favour of changing the timing of B.C.’s observance of DST to align with practices in United States and other Canadian provinces. A relatively small number (approximately 10%) of respondents favoured abolishing the time change and observing either Standard Time or Daylight Saving Time year-round.

Time Observance in Other Jurisdictions

Other Canadian Provinces and Territories

In 2017, the Alberta legislature voted against a bill to eliminate the bi-annual time change, contradicting the feedback collected by a legislative committee in which approximately two-thirds of Albertans indicated they were in favour of eliminating the practice.

Yukon’s time observance is currently synchronized with British Columbia’s.

United States

California, Oregon and Washington currently have the same dates for Daylight Saving Time observance as British Columbia. However, each state has proposed or passed legislation aimed at eliminating the time change and observing Daylight Saving Time year-round.

Federal legislation in the United States requires that each state receive authorization from the federal government to adopt Daylight Saving Time year-round. States do not require federal approval to remain on Standard Time all year or to continue observing the bi-annual time change.

Impacts of Changing Time Observance

Sunrise and Sunset

Under our current system, Daylight Saving Time begins on the second Sunday in March and ends on the first Sunday in November. The following two tables show how decisions about time observance will affect times of sunrise and sunset at particular times of the year.

When compared to our current practice:

- If Daylight Saving Time is observed year-round, sunrise would occur later in the winter – as late as 9:00 a.m. in Vancouver and 9:30 a.m. in northern BC communities such as Prince George.

Table #1: Predicted Sunrises and Sunsets in Vancouver 2019

Edit				
Vancouver	Sunrise Under Current System	Sunrise with Daylight Saving Time Year-round	Sunset Under Current System	Sunset with Daylight Saving Time Year-round
March 10 (Daylight Saving Time Begins)	7:36 a.m.	7:36 a.m.	7:09 p.m.	7:09 p.m.
June 21 (Summer Solstice)	5:06 a.m.	5:06 a.m.	9:21 p.m.	9:21 p.m.
November 3 (Daylight Saving Time Ends)	7:03 a.m.	8:03 a.m.	4:47 p.m.	5:47 p.m.

Edit				
Vancouver	Sunrise Under Current System	Sunrise with Daylight Saving Time Year-round	Sunset Under Current System	Sunset with Daylight Saving Time Year-round
December 21 (Winter Solstice)	8:05 a.m.	9:05 a.m.	4:16 p.m.	5:16 p.m.

Table #2: Predicted Sunrises and Sunsets in Prince George 2019

Edit				
Prince George	Sunrise Under Current System	Sunrise with Daylight Saving Time Year-round	Sunset Under Current System	Sunset with Daylight Saving Time Year-round
March 10 (Daylight Saving Time Begins)	7:38 a.m.	7:38 a.m.	7:05 p.m.	7:05 p.m.
June 21 (Summer Solstice)	4:39 a.m.	4:39 a.m.	9:46 p.m.	9:46 p.m.
November 3 (Daylight Saving Time Ends)	7:15 a.m.	8:15 a.m.	4:33 p.m.	5:33 p.m.

[Edit](#)

Prince George	Sunrise Under Current System	Sunrise with Daylight Saving Time Year-round	Sunset Under Current System	Sunset with Daylight Saving Time Year-round
December 21 (Winter Solstice)	8:27 a.m.	9:27 a.m.	3:50 p.m.	4:50 p.m.

Source: <https://www.timeanddate.com/sun/>

Time Alignment with Neighbouring Provinces, Territories and States

In 2017, the Alberta legislature voted against eliminating the bi-annual time change. As a result, the province continues to observe Daylight Saving Time in the summer months, and Standard Time in the winter. Time observance in B.C. is currently synchronized with Alberta, meaning that we remain **one hour behind** throughout the year.

- Adopting **Daylight Saving Time** year-round would result in B.C. clocks remaining **one hour behind** Alberta's in the summer months, and being **exactly aligned** with Alberta's in the winter months.

Yukon's time observance is currently synchronized with British Columbia's.

California, Oregon and Washington currently have the same dates for Daylight Saving Time observance as British Columbia. However, each state has proposed or passed legislation aimed at eliminating the time change and observing Daylight Saving Time year-round. These legislative changes would also require approval by the federal Congress. Providing that legislation in these states successfully passes:

- Adopting **Daylight Saving Time** year-round would result in B.C. clocks remaining **exactly aligned** with clocks in California, Oregon and Washington year-round.

Studies on the Effects of Changing our Clocks

Traffic Accidents

A popularly cited study^[1] relating to traffic accidents and their link to Daylight Saving Time was published in the New England Journal of Medicine in 1996. The research, based on data from 1991 and 1992, suggested that traffic incidents rose by 8% on the Monday after the clock turned forward, and fell by roughly the same amount on the Monday following the switch back.

Since this study, researchers have investigated this issue, with varying results:

- One review conducted by a physician at Sunnybrook Health Sciences Centre in Toronto looked at 16 traffic studies, where six studies indicated an increased risk of crashes after the spring time change, three indicated a decreased risk; and seven found no significant difference either way; and
- Another systematic review^[2] looked at twenty-four studies on the short-term and long-term impact of daylight saving time on road traffic collision risk. Of these studies, the short-term studies findings were inconsistent, and the long-term findings suggested a positive effect of Daylight Saving Time.

Health Effects

Changing clocks disturbs the ability of some people to sleep properly for a period of time after the change. These effects can be minor or significant depending on the individual.

A study published in 2008 in the New England Journal of Medicine, by researchers at the Karolinska Institute in Stockholm, is popularly cited as showing that heart attack cases increased by 5% in the week after clocks were adjusted both in the spring and autumn.

However, other research has produced conflicting results.

- A Michigan study^[3], assessed changes in the number of heart attack related hospital admissions following Daylight Saving Time changes between March 2010 and September 2013. The study concluded that in the week following the seasonal change, the timing of heart attack presentations were impacted but the overall incidence of the disease was not.
- German researchers^[4], who looked at 25,000 cases of fatal and non-fatal heart attacks recorded in Germany between 1995 and 2010, found no significant change in heart attacks in the general population only an increased risk amongst specific subgroups such as men who had previously experienced heart attacks.
- Other studies indicate further investigation is required to confirm that sleep deprivation, circadian misalignment, and environmental conditions have a modest increase in occurrence of heart attacks^{[5][6]}.

A paper^[7] studying 3.4 million respondents utilizing the United States Behavioral Risk Factor Surveillance System and 160 hospital admissions from Germany over one decade, did not find evidence that population health significantly decreases when the clocks are set forward in the spring. However, the findings did show consistent evidence that health significantly improves for about four days following the fall time change.

Energy Consumption

A 2008 study by the National Bureau of Economic Research^[8] concluded that while lighting demand dropped after the Daylight Saving Time change, the warmer hour of extra daylight in the evenings led to increased air-conditioning use. This cancelled out the gains from reduced lighting. In some cases, electric bills were even higher than before the change.

[1] <https://www.nejm.org/doi/full/10.1056/NEJM199604043341416>

[2] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5734262/>

[3] <https://openheart.bmj.com/content/openhrt/1/1/e000019.full.pdf>

[4] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4535383/>

[5] <https://www.ncbi.nlm.nih.gov/pubmed/29971599>

[6] <https://www.ncbi.nlm.nih.gov/pubmed/30909587>

[7] <http://ftp.iza.org/dp9088.pdf>

[8] <https://www.nber.org/papers/w14429>

Process and Timelines

The public engagement period will run from June 24, 2019 to July 19, 2019 at 4:00 p.m. During this time, interested individuals and organizations will be invited to share their opinions in the following ways:

- Individuals may complete the [online survey](#).
- Experts and organizations may provide formal submissions via email to citizenengagement@gov.bc.ca. Please read the [guidelines for formal submissions](#).

Feedback collected through this engagement will be weighed alongside decisions adopted by neighbouring jurisdictions to help government determine the best course of action for B.C. A final decision is expected to be announced in the fall of 2019.

Guidelines for Formal Submissions

Experts and organizations may provide written submissions regarding their preferences toward Daylight Saving Time. Submissions must be delivered in either Word or PDF format with a 5 page limit by July 19, 2019 at 4:00 p.m. We recommend that anyone providing a formal submission reference any relevant organization with which they are affiliated and identify the community in which they reside.

All submissions will be posted publicly provided they:

1. Do not contain profanity or is defamatory, threatening, hateful, personally disparaging, harassing, indecent, vulgar, obscene, illegal, immoral or sexually explicit (partially masking profanity or other unacceptable language by substituting asterisks or other symbols into a word is not acceptable if the word remains recognizable);
2. Do not appear to, or do actually, infringe the copyright, trade-mark, right of privacy, right of publicity or any other intellectual property or other proprietary right of any third party;
3. Do not contain information about, or images (e.g., photographs, videos or illustrations) of, any person other than the person submitting the content;
4. Do not advertise any product, person or organization, or directs attention to another website for personal gain;
5. Do not provide links to, or information about, other sites that contain unlawful, objectionable or inappropriate content;
6. Do not make unproven or unsupported accusations against individuals, groups or organizations;
7. Do not appear to be spam-like messaging, a repeat posting or a template letter writing campaign; and
8. Are not far off-topic.

All submissions will be read and considered as part of the analysis of this project. The Province reserves the right to determine whether a submission meets the above criteria and may be posted to this web site.

Depending on the volume received, it may require several weeks to complete the review and posting of all submissions.

Ways to Participate

The public engagement period will run from June 24, 2019 to July 19, 2019 at 4:00 p.m. During this time, interested individuals and organizations will be invited to share their opinions by:

- Individuals may complete the [online survey](#).

- Experts and organizations may provide formal submissions via email to citizenengagement@gov.bc.ca. Please read the [guidelines for formal submissions](#).
- If you require phone support (including TDD) to complete the online feedback form, please contact ServiceBC (local Vancouver and toll-free): Vancouver: 604 775-0303 and elsewhere in B.C.: 1 800 661-8773

Feedback collected through this engagement will be weighed alongside decisions adopted by neighbouring jurisdictions to help government determine the best course of action for B.C. A final decision is expected to be announced in the fall of 2019

Privacy Policy:

Personal information collected by the Government Communication and Public Engagement for the Ministry of Attorney General is under the authority of section 26(c) and 26(e) of the Freedom of Information and Protection of Privacy Act for the purpose of informing the Daylight Saving Time project. If you have any questions about the collection, use and disclosure of your personal information, please contact: Director, Citizen Engagement, PO Box 9409, STN PROV GOVT Victoria BC, V8W 9V1, 250-208-3591.

APPENDIX B: SURVEY INSTRUMENT

Daylight Saving Time Survey

British Columbians are invited to share their views on how we should observe time in our province. Most areas of B.C. currently “spring forward” into Daylight Saving Time during summer months and “fall back” to Standard Time in the winter.

The following choices are being considered:

1. B.C. continues the practice of changing our clocks bi-annually; or
2. B.C. adopts year-round observance of Daylight Saving Time.

The survey will be open until July 19, 2019 at 4pm.

About the Survey

The survey should take approximately 5 minutes to complete. It offers an opportunity to share your views on the following issues:

- Whether B.C. should continue to observe the bi-annual time change; and
- How important it is to you that B.C. aligns with neighbouring provinces, territories and states.

Next Steps

- Survey responses will be used to inform the development of the B.C. government’s position on time observance.
- Survey results will be posted later this year.

Feedback collected through this engagement will be weighed alongside decisions adopted by neighbouring jurisdictions to help government determine the best course of action for B.C. A final decision is expected to be announced in the fall of 2019.

Before taking the Daylight Saving Time Engagement survey, please review this [background information](#) on the current state of time observance in British Columbia and other jurisdictions, and the pros and cons of different time change options.

Please do not include any personally identifiable information about yourself or others in your responses.

If you require phone support (including TDD) to complete the online feedback form, please contact ServiceBC (local Vancouver and toll-free): Vancouver: 604 775-0303 and elsewhere in B.C.: 1 800 661-8773

Please note: *This online feedback form supports IE11 and all newer comparable browsers like Firefox, Chrome, Opera etc. with activated JavaScript. Your browser settings must have cookies enabled for the questionnaire to run properly and inactivity on the questionnaire for longer than one hour will result in the questionnaire timing out.*

Collection Notice: Personal information collected by the Government Communication and Public Engagement for the Ministry of Attorney General, is under the authority of section 26(c) and 26(e) of the Freedom of Information and Protection of Privacy Act for the purpose of informing the Daylight Saving Time project. If you have any questions about the collection, use and disclosure of your personal information, please contact: Director, Citizen Engagement, PO Box 9409, STN PROV GOVT Victoria BC, V8W 9V1, 250-208-3591. If you have questions on the citizen engagement process, please email citizenengagement@gov.bc.ca

There are 11 questions in this survey.

Do you believe B.C. should adopt year-round observance of Daylight Saving Time?

Choose one of the following answers

- Yes
- No, I think B.C. should continue our current practice of "springing forward" into Daylight Saving Time in the summer, and "falling back" to Standard Time in the winter.

Why do you prefer continuing to observe the bi-annual time change?

Only answer this question if the following conditions are met:

Answer was 'No, I think B.C. should continue our current practice of "springing forward" into Daylight Saving Time in the summer, and "falling back" to Standard Time in the winter.' at question '1 [Q1]' (Do you believe B.C. should adopt year-round observance of Daylight Saving Time?)

Check all that apply

- ☐ Balances daylight observance throughout the year
- ☐ Benefits me professionally/economically
- ☐ Safety reasons
- ☐ Health and/or wellness reasons
- ☐ Environmental protection reasons
- ☐ Other:

Why do you prefer observing Daylight Saving Time year-round?

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '1 [Q1]' (Do you believe B.C. should adopt year-round observance of Daylight Saving Time?)

Check all that apply

- ☐ These hours of daylight benefit me professionally/economically
- ☐ Additional daylight during evening commute
- ☐ Safety reasons (other than road safety)
- ☐ Health and/or wellness reasons
- ☐ Environmental protection reasons
- ☐ Other:

How important do you think it is for B.C. to be aligned with neighbouring provinces, territories and states?

Choose one of the following answers

- ☐ Very Important
- ☐ Important
- ☐ Neutral
- ☐ Low Importance
- ☐ Not Important

Washington, Oregon and California are considering year-round observance of Daylight Saving Time. If these states implement the changes, do you believe B.C. should:

Choose one of the following answers

- ☐ Decide independently what time observance is best for British Columbia, even if this means British Columbia is not on the same time as Yukon, Washington, Oregon, and California for all or part of the year.
- ☐ Change, as required, to align with how Yukon, Washington, Oregon and California observe time.

What is your gender?

Choose one of the following answers

- ☐ Woman
- ☐ Man
- ☐ Gender X

Do you identify as an Indigenous person, that is, First Nations (status or non-status), Métis or Inuit?

Choose one of the following answers

- ☐ Yes
- ☐ No

Which region do you live in?

Choose one of the following answers

- ☐ Vancouver Island & South Coast/Sunshine Coast
- ☐ Lower Mainland
- ☐ Thompson-Okanagan
- ☐ Cariboo
- ☐ East Kootenay
- ☐ West Kootenay
- ☐ Creston
- ☐ Peace
- ☐ North Coast
- ☐ Nechako
- ☐ Stikine

Which age category do you belong to?

Choose one of the following answers

- ☐ Under 18
- ☐ 18 - 39 years
- ☐ 40 - 64 years
- ☐ 65 - 75 years
- ☐ Over 75 years

What is your role/occupation?

Choose one of the following answers

If you choose 'Other:' please also specify your choice in the accompanying text field.

- ☐ Management
- ☐ Business, finance and administration occupations
- ☐ Natural and applied sciences and related occupations
- ☐ Occupations in health, education, law and social, community and government services
- ☐ Occupations in art, culture, recreation and sport
- ☐ Sales and service occupations
- ☐ Trades, transport and equipment operators and related occupations
- ☐ Natural resources, agriculture and related production occupations
- ☐ Occupations in manufacturing and utilities
- ☐ Student
- ☐ Retired
- ☐ Unemployed
- ☐ Maternity Leave
- ☐ Homemaker
- ☐ Other

Which of the options below best describes your industry?

Only answer this question if the following conditions are met:

Answer was 'Occupations in manufacturing and utilities' *or* 'Natural resources, agriculture and related production occupations' *or* 'Trades, transport and equipment operators and related occupations' *or* 'Sales and service occupations' *or* 'Occupations in art, culture, recreation and sport' *or* 'Occupations in health, education, law and social, community and government services' *or* 'Natural and applied sciences and related occupations' *or* 'Business, finance and administration

occupations' *or* 'Management' *or* 'Maternity Leave' at question '10 [Dem5]' (What is your role/occupation?)

Choose one of the following answers

- ☐ Agriculture, forestry, fishing and hunting
- ☐ Mining, quarrying, and oil and gas extraction
- ☐ Utilities
- ☐ Construction
- ☐ Manufacturing
- ☐ Wholesale or retail trade
- ☐ Transportation and warehousing
- ☐ Information and cultural industries
- ☐ Finance, insurance, management of companies and enterprises
- ☐ Real estate and rental and leasing
- ☐ Professional, scientific and technical services
- ☐ Administrative and support, waste management and remediation services
- ☐ Educational, health care, social assistance services
- ☐ Arts, entertainment and recreation
- ☐ Service industry
- ☐ Public administration

Thank you for your feedback.

APPENDIX C: OPEN-ENDED COMMENTS CODING FRAMEWORKS

Q1a[other]: Why do you prefer continuing to observe the bi-annual time change? Other, please specify.

Code Number	Code Name	Description / Instructions
1	Balances daylight observance throughout the year	Response indicates preference for sunlight hours in the morning, with NO OTHER considerations brought up (if prefer sunlight in morning for safety reasons, code as 3; if prefer sunlight in morning for health / wellness reasons, code as 4)
2	Benefits me professionally / economically	Response indicates that the biannual time change is helpful in the industry they work in. Also code consistency with other regions as beneficial to industry / business as 2 here
3	Safety reasons	Response indicates concern for safety of cyclists, commuters, people exercising outdoors, and/or children going to school, in the mornings.
4	Health and/or wellness reasons	Response indicates that preference is motivated by personal health and wellness reasons, including mental / emotional health
5	Environmental protection reasons	Response indicates that the time change helps save energy or has other environmental benefits
10	Defense of status quo	Response indicates desire to continue biannual time change, with no reason given other than perhaps it would be easier to maintain the status quo.
11	Prefer year-round standard time	Response indicates preference to change to standard time year round, but if cannot have that then want to keep the bi-annual change
12	Conformity to other jurisdictions	Response indicates they would prefer to remain consistent with time practices elsewhere (in Canada and US/North America)
13	General preference for current system	Response is a general endorsement of the status quo, no reason given other than personal preference. Include responses that say it is "easier for children" without further discussion (if comments on SAFETY for children, code as 3).
14	Does not care /does not matter	No preference
99 Other	Inappropriate	Response is grossly inappropriate, appears to be a joke, or otherwise not worthy of consideration
	Non-factual	Response makes untrue or unprovable assertions
	Doesn't understand their selected option	Response actually <i>supports</i> a change to year-round daylight savings time, or seems to think that the sun would set <i>earlier</i> than it does in the summer as a result of the potential change
	Unintelligible or complete non-sequitur	Response is impossible to make sense of.

Q1bc[other]: Why do you prefer observing Daylight Saving Time year-round? Other, please specify

Code Number	Code Name	Description / Instructions
1	Benefits me professionally / economically	Response indicates that consistent time throughout the year / daylight savings time throughout the year as beneficial to industry or occupation they work in.
2	Additional daylight during evening commute	Response identifies road-related safety benefits as a result of daylight hours being shifted to evening
3	Safety reasons (other than road safety)	Response identifies other safety benefits from observing daylight savings year-round
4	Health and/or wellness reasons	Response identifies health and/or wellness benefits to year-round daylight savings time, including emotional and social benefits to children
5	Environmental protection reasons	Response identifies energy savings or other environmental reasons to observe year-round daylight savings time
10	Observing time change does not make sense	General comments about observing the time change being dumb, not making sense in our current society, etc. WITHOUT giving any other reason (if they address health, safety, personal preference, etc., code as such according to codes below)
11	Prefer more daylight in late afternoon / evening hours	Response indicates a preference for having daylight hours later in the day rather than in the morning, including for social or leisure reasons
12	Prefer year-round standard time	Response indicates preference for year-round standard time, but if that is not an option they prefer year-round daylight savings time just to avoid the switching
13	Align with other regions	Response indicates preference to align with certain regions (whether within BC, elsewhere in Canada, or the United States)
14	Does not care /does not matter	No preference
15	Changing clocks is a hassle	Respondent indicates that they find changing clocks to be a personal hassle, difficult to remember, etc. but does NOT indicate other issues such as safety issues, leisure activities in daylight hours, etc., as a part of that hassle
16	General preference for DST	Respondent indicates preference for year-round daylight savings time but with no other reason given
99 Other	Not an actual reason	Response doesn't give any additional information, just re-states the desire to end the clock change
	Inappropriate	Response is grossly inappropriate, appears to be a joke, or otherwise not worthy of consideration
	Non-factual	Response makes untrue or unprovable assertions

Q1bc[other]: Why do you prefer observing Daylight Saving Time year-round? Other, please specify

Code Number	Code Name	Description / Instructions
	Doesn't understand their selected option	Response appears to support moving to year-round standard time (without explicitly commenting about the lack of option in the survey)
	Unintelligible or complete non-sequitur	Response is impossible to make sense of.

APPENDIX D: SURVEY DATA TABLES

Completions and Respondent Demographics

Table D1: Overall Responses and Completions

Surveys Started	236,571	100.0%
Responses to First Question	223,465	94.5%
Surveys Completed	223,273	94.4%

Table D2: Survey Responses, by Gender

Gender	Frequency	Valid Percent
Woman	124,420	56.1%
Man	94,263	42.5%
Gender X	3,090	1.4%
Valid Total	221,773	100.0%
No response	1,692	-
Total	223,465	-

Table D3: Survey Responses, by Indigenous Identity

Indigenous Identity	Frequency	Valid Percent
Yes, identify as Indigenous	9,074	4.1%
No, do not identify as Indigenous	211,661	95.9%
Valid Total	220,735	100.0%
No response	2,730	-
Total	223,465	-

Table D4: Survey Responses, by Region

Region	Frequency	Valid Percent
Vancouver Island / Sunshine Coast	62,386	28.1%
Lower Mainland	98,549	44.3%
Thompson-Okanagan	33,801	15.2%
Cariboo	7,326	3.3%
East Kootenay	5,400	2.4%
West Kootenay	6,591	3.0%
Creston	586	0.3%
Peace	1,763	0.8%
North Coast	2,199	1.0%
Nechako	3,214	1.4%
Stikine	591	0.3%
Valid Total	222,406	100.0%
No response	1,059	-
Total	223,465	-

Table D5: Survey Responses, by Age Category

Age Category	Frequency	Valid Percent
Under 18	646	0.3%
18 to 39 years old	66,175	29.8%
40 to 64 years old	108,860	49.0%
65 to 75 years old	37,205	16.8%
Over 75	9,202	4.1%
Valid Total	222,088	100.0%
No response	1,377	-
Total	223,465	-

Table D6: Survey Responses, by Occupation

Occupation	Frequency	Valid Percent
Management	22,348	10.1%
Business, finance, and administration occupations	26,322	11.8%
Natural and applied sciences and related occupations	7,552	3.4%
Occupations in health, education, law and social, community and government services	46,191	20.8%
Occupations in art, culture, recreation and sport	6,154	2.8%
Sales and service occupations	14,328	6.4%
Trades, transport and equipment operators and related occupations	16,462	7.4%
Natural resources, agriculture and related production occupations	3,599	1.6%
Occupations in manufacturing and utilities	2,643	1.2%
Student	4,611	2.1%
Retired	51,513	23.2%
Unemployed	1,423	0.6%
Maternity leave	1,405	0.6%
Homemaker	6,421	2.9%
Other, please specify	11,241	5.1%
Valid Total	222,213	100.0%
No response	1,252	-
Total	223,465	-

Table D7: Survey Responses, by Industry

Industry	Frequency	Valid Percent
Agriculture, forestry, fishing and hunting	6,010	4.1%
Mining, quarrying, and oil and gas extraction	3,192	2.2%
Utilities	2,842	1.9%
Construction	8,807	6.0%
Manufacturing	5,210	3.6%
Wholesale or retail trade	9,178	6.3%
Transportation and warehousing	6,733	4.6%
Information and cultural industries	3,375	2.3%
Finance, insurance, management of companies and enterprises	10,100	6.9%
Real estate and rental and leasing	3,247	2.2%
Professional, scientific and technical services	18,732	12.8%
Administrative and support, waste management and remediation services	2,147	1.5%
Educational, health care, social assistance services	38,154	26.1%
Arts, entertainment and recreation	7,385	5.0%
Service industry	11,639	8.0%
Public administration	9,643	6.6%
Valid Total	146,394	100.0%
No response	77,071	-
Total	223,465	-

Overall Responses to Survey Items

Table D8: Attitudes towards Change to Year-Round DST, All Respondents

Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Frequency	Valid Percent
Yes, B.C. should adopt year-round DST	207,824	93.0%
No, B.C. should continue to observe the bi-annual time change	15,641	7.0%
Valid Total	223,465	100.0%
No response	0	-
Total	223,465	-

Table D9: Reasons for Preferring Bi-Annual Time Change, All Respondents (closed-ended options only)

Why do you prefer to continue observing the bi-annual time change?	Frequency	Valid Percent*
Balances daylight observance throughout the year	11,689	74.7%
Benefits me professionally / economically	2,814	18.0%
Safety reasons	4,503	28.8%
Health and / or wellness reasons	5,547	35.5%
Environmental protection reasons	1,780	11.4%
Other, please specify	1,946	12.4%

* Valid percent was calculated as a proportion of all respondents who reported preferring the bi-annual time change (n=15,641). Percentages add to more than 100% due to multiple responses.

Table D10: Reasons for Preferring Bi-Annual Time Change, Coded Open-Ended Responses*

Why do you prefer to continue observing the bi-annual time change?	Frequency	Valid Percent
Balances daylight observance throughout the year [†]	37	8.5%
Benefits me professionally / economically [†]	16	3.7%
Safety reasons [†]	53	12.1%
Health and / or wellness reasons [†]	16	3.7%
Environmental protection reasons [†]	5	1.1%
Defense of status quo	47	10.8%
Prefer year-round standard time	121	27.7%
Conformity to other jurisdictions	63	14.4%
General preference for current system	65	14.9%
Do not care / does not matter	14	3.2%
Valid Coded Responses	437	100.0%
Other / off-topic	50	-
Total	487	-

* A minority of survey respondents provided an open-ended response to this question (n=1,946). Due to the high volume of open-ended comments, Malatest took a 25% random sample of comments (stratified by region) and coded this sample. This table reflects the 25% sample of comments.

[†] These codes were also closed-ended response options; where appropriate, comments were "upcoded" to these response options.

Table D11: Reasons for Preferring Year-Round DST, All Respondents (closed-ended options only)

Why do you prefer observing Daylight Saving Time year-round?	Frequency	Valid Percent*
The additional hours of daylight benefit me professionally / economically	74,861	36.0%
Additional daylight during evening commute	109,989	52.9%
Safety reasons	80,315	38.6%

Health and / or wellness reasons	155,424	74.8%
Environmental protection reasons	33,108	15.9%
Other, please specify	27,234	13.1%

* Valid percent was calculated as a proportion of all respondents who reported preferring year-round DST (n=207,824). Percentages add to more than 100% due to multiple responses.

Table D12: Reasons for Preferring Year-Round DST, Coded Open-Ended Responses*

Why do you prefer to continue observing the bi-annual time change?	Frequency	Valid Percent
Benefits me professionally / economically [†]	201	2.9%
Additional daylight during evening commute [†]	158	2.3%
Safety reasons [†]	37	0.5%
Health and / or wellness reasons [†]	930	13.6%
Environmental protection reasons [†]	27	0.4%
Observing time change does not make sense	1,736	25.4%
Prefer more daylight in late afternoon / evening hours	677	9.9%
Prefer year-round standard time	188	2.7%
Align with other regions	341	5.0%
Do not care / does not matter	90	1.3%
Changing clocks is a hassle	1,576	23.0%
General preferences for DST	882	12.9%
Valid Coded Responses	6,843	100.0%
Other / off-topic	337	-
Total	7,180	-

* A minority of survey respondents provided an open-ended response to this question (n=27,234). Due to the high volume of open-ended comments, Malatest took a 25% random sample of comments (stratified by region) and coded this sample. This table reflects the 25% sample of comments.

[†] These codes were also closed-ended response options; where appropriate, comments were “upcoded” to these response options.

Table D13: Importance of Alignment with Neighbouring Jurisdictions, All Respondents

How important do you think it is for B.C. to be aligned with neighbouring provinces, territories and states?	Frequency	Valid Percent
Very important	69,807	31.2%
Important	51,201	22.9%
Neutral	56,348	25.2%
Low importance	21,884	9.8%
Not important	24,426	10.9%
Valid Responses	223,666	100.0%
No response	0	-
Total	223,666	-

Table D14: Preferred Course of Action for B.C., All Respondents

Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should B.C. do?	Frequency	Valid Percent
B.C. should decide independently what time observance is best for B.C.	99,629	44.6%
B.C. should change, as required, to align with how Washington, Oregon and California observe time	123,836	55.4%
Valid Responses	223,465	100.0%
No response	0	-
Total	223,465	-

Cross-Tabulations of Attitude Items by Demographic Variables of Interest

By Region

Table D15: Attitudes towards Changing To Year-Round DST, by Region

Survey Item	Response	Vancouver Island / Sunshine Coast (A)		Lower Mainland (B)		Thompson-Okanagan (C)		Cariboo (D)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Yes, BC should adopt year-round DST	57,596	92.8% ^E	90,764	92.5%	31,848	94.6% ^{A,B,E,I}	6,842	93.8% ^{B,E,I}	
	No, BC should continue to observe the bi-annual time change	4,469	7.2% ^{C,F,G,H}	7,376	7.5% ^{C,D,F,G,H}	1,807	5.4% ^F	450	6.2% ^F	
	Total	62,065	100.0%	98,140	100.0%	33,655	100.0%	7,292	100.0%	
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	18,117	29.1% ^I	32,350	32.9% ^{A,D,E,F,I,J,K}	10,806	32.1% ^{A,E,F,I,J,K}	2,247	30.8% ^{E,I,J,K}	
	Important	14,459	0.233	22,573	23.0%	7,538	22.4%	1,663	22.8%	
	Neutral	16,139	26.0% ^B	23,834	24.3%	8,448	25.1%	1,906	26.1% ^B	
	Low importance	6,520	10.5% ^{B,C,D}	9,167	9.3%	3,249	9.6%	671	9.2%	
	Not important	6,936	11.2% ^B	10,334	10.5%	3,656	10.8%	802	11.0%	
	Total	62,171	100.0%	98,258	100.0%	33,697	100.0%	7,289	100.0%	
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	28,845	46.4% ^B	39,126	39.8%	15,651	46.5% ^B	3,854	52.9% ^{A,B,C,F}	
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	33,285	53.6% ^{D,E,F,H,I,J,K}	59,090	60.2% ^{A,C,D,E,F,G,H,I,J,K}	18,013	53.5% ^{D,E,F,H,I,J,K}	3,426	47.1% ^{E,H}	
	Total	62,130	100.0%	98,216	100.0%	33,664	100.0%	7,280	100.0%	

Survey Item	Response	East Kootenay (E)		West Kootenay (F)		Creston (G)		Peace (H)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you believe B.C. should adopt year-round observance of	Yes, BC should adopt year-round DST	4,920	91.6%	6,270	95.6% ^{A,B,C,D,E,I,J}	562	96.6%	1,676	95.2% ^{A,B,E,I}	
	No, BC should continue	453	8.4% ^{A,C,D,F,G,H,J}	286	4.4%	20	3.4%	85	4.8%	

Survey Item	Response	East Kootenay (E)		West Kootenay (F)		Creston (G)		Peace (H)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Daylight Saving Time?	to observe the bi-annual time change									
	Total	5,373	100.0%	6,556	100.0%	582	100.0%	1,761	100.0%	
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	1,473	27.4%	1,903	29.0%	180	31.0%	559	31.8% ^{E,I,J,K}	
	Important	1,184	22.0%	1,503	22.9%	124	21.3%	385	21.9%	
	Neutral	1,441	26.8% ^B	1,754	26.7% ^B	150	25.8%	442	25.2%	
	Low importance	559	10.4%	650	9.9%	57	9.8%	171	9.7%	
	Not important	718	13.4% ^{A,B,C,D}	759	11.6%	70	12.0%	199	11.3%	
	Total	5,375	100.0%	6,569	100.0%	581	100.0%	1,756	100.0%	
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	3,392	63.2% ^{A,B,C,D,F,G,I,J,K}	3,248	49.5% ^{A,B,C}	301	51.6% ^B	1,081	61.6% ^{A,B,C,D,F,G,I,J}	
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	1,977	36.8%	3,309	50.5% ^{D,E,H,J}	282	48.4% ^{E,H}	674	38.4%	
	Total	5,369	100.0%	6,557	100.0%	583	100.0%	1,755	100.0%	

Survey Item	Response	North Coast (I)		Nechako (J)		Stikine (K)	
		Count	Column %	Count	Column %	Count	Column %
Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Yes, BC should adopt year-round DST	2,003	91.7%	3,002	93.9% ^E	548	93.0%
	No, BC should continue to observe the bi-annual time change	182	8.3% ^{C,D,F,G,H}	195	6.1% ^F	41	7.0%
	Total	2,185	100.0%	3,197	100.0%	589	100.0%
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	559	25.5%	869	27.1%	140	23.8%
	Important	522	23.9%	705	22.0%	128	21.7%
	Neutral	605	27.7% ^B	929	29.0% ^{A,B,C}	160	27.2%
	Low importance	232	10.6%	348	10.9%	80	13.6% ^{B,D}
	Not important	270	12.3%	353	11.0%	81	13.8%
	Total	2,188	100.0%	3,204	100.0%	589	100.0%

Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	1,104	50.7% ^{A,B,C}	1,725	54.0% ^{A,B,C,F}	321	54.6% ^{A,B,C}
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	1,075	49.3% ^{E,H}	1,472	46.0% ^{E,H}	267	45.4% ^E
	Total	2,179	100.0%	3,197	100.0%	588	100.0%

Superscript letters indicate that the proportion in this cell is statistically significantly higher (at the $p < .05$ confidence level) than the proportion in the same row, in the column letter indicated by the superscript letter.

Z-tests for differences in proportion were conducted at the $p < .05$ confidence level. Where appropriate, Bonferroni corrections for multiple comparisons were made.

By Age

Table D16: Attitudes towards Changing To Year-Round DST, by Age

Survey Item	Response	Under 18 (A)		18 - 39 years (B)		40 - 64 years (C)		65 - 75 years (D)		Over 75 years (E)	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %
Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Yes, BC should adopt year-round DST	515	80.1%	61,161	92.6% ^A	101,251	93.3% ^{A,B}	34,397	93.2% ^{A,B}	8,442	93.3% ^A
	No, BC should continue to observe the bi-annual time change	128	19.9% ^{B,C,D,E}	4,860	7.4% ^{C,D}	7,216	6.7%	2,520	6.8%	604	6.7%
	Total	643	100.0%	66,021	100.0%	108,467	100.0%	36,917	100.0%	9,046	100.0%
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	159	24.7%	14,682	22.2%	34,045	31.4% ^{A,B}	15,579	42.1% ^{A,B,C}	4,680	51.4% ^{A,B,C,D}
	Important	157	24.3%	14,313	21.7%	24,954	23.0% ^B	9,120	24.6% ^{B,C}	2,170	23.8% ^B
	Neutral	174	27.0% ^{D,E}	19,522	29.6% ^{C,D,E}	27,602	25.4% ^{D,E}	7,111	19.2% ^E	1,289	14.2%
	Low importance	83	12.9% ^{C,D,E}	8,270	12.5% ^{C,D,E}	10,302	9.5% ^{D,E}	2,557	6.7% ^E	461	5.1%
	Not important	72	11.2% ^{D,E}	9,251	14.0% ^{C,D,E}	11,635	10.7% ^{D,E}	2,667	7.2% ^E	504	5.5%
	Total	645	100.0%	66,038	100.0%	108,538	100.0%	37,034	100.0%	9,104	100.0%
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	310	48.1% ^{D,E}	32,710	49.5% ^{C,D,E}	48,863	45.0% ^{D,E}	13,705	37.1% ^E	2,908	32.1%
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	335	51.9%	33,336	50.5%	59,614	55.0% ^B	23,271	62.9% ^{A,B,C}	6,155	67.9% ^{A,B,C,D}
	Total	645	100.0%	66,046	100.0%	108,477	100.0%	36,976	100.0%	9,063	100.0%

Superscript letters indicate that the proportion in this cell is statistically significantly higher (at the p<.05 confidence level) than the proportion in the same row, in the column letter indicated by the superscript letter.

Z-tests for differences in proportion were conducted at the p<.05 confidence level. Where appropriate, Bonferroni corrections for multiple comparisons were made.

By Industry

Table D17: Attitudes towards Changing To Year-Round DST, by Industry

Survey Item	Response	Agriculture, forestry, fishing and hunting (A)		Mining, quarrying, and oil and gas extraction (B)		Utilities (C)		Construction (D)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Yes, BC should adopt year-round DST	5,512	92.2%	2,951	92.6%	2,645	93.4%	8,033	91.6%	
	No, BC should continue to observe the bi-annual time change	469	7.8%	236	7.4%	188	6.6%	738	8.4% ^{E,F,G,K,M,N,O}	
	Total	5,981	100.0%	3,187	100.0%	2,833	100.0%	8,771	100.0%	
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	1,675	28.0%	884	27.8% ^N	907	32.0% ^{A,B,H,K,M,N,P}	2,559	29.1% ^{H,K,M,N}	
	Important	1,315	21.9%	665	20.9%	616	21.7%	1,891	21.5%	
	Neutral	1,539	25.7%	807	25.4%	647	22.8%	2,241	25.5%	
	Low importance	652	10.9%	343	10.8% ^G	304	10.7%	869	9.9%	
	Not important	811	13.5%	482	15.2% ^{E,F,G,I,J,L,M,O,P}	364	12.8% ^M	1,223	13.9% ^{F,J,M,O,P}	
	Total	5,992	100.0%	3,181	100.0%	2,838	100.0%	8,783	100.0%	
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	2,956	49.4%	1,616	50.8% ^{C,D,E,F,G,H,I,J,K,N,O,P}	1,197	42.2%	4,033	46.0% ^{C,E,G,K}	
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	3,028	50.6%	1,567	49.2%	1,642	57.8% ^{A,B,D,M,O}	4,740	54.0% ^{A,B,M}	
	Total	5,984	100.0%	3,183	100.0%	2,839	100.0%	8,773	100.0%	

Survey Item	Response	Manufacturing (E)		Wholesale or retail trade (F)		Transportation and warehousing (G)		Information and cultural industries (H)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you believe B.C.	Yes, BC should adopt year-round	4,872	93.7% ^D	8,560	93.5% ^D	6,308	94.1% ^{A,D,I}	3,139	93.3%	

Survey Item	Response	Manufacturing (E)		Wholesale or retail trade (F)		Transportation and warehousing (G)		Information and cultural industries (H)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
should adopt year-round observance of Daylight Saving Time?	DST									
	No, BC should continue to observe the bi-annual time change	326	6.3%	592	6.5%	397	5.9%	226	6.7%	
	Total	5,198	100.0%	9,152	100.0%	6,705	100.0%	3,365	100.0%	
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	1,621	31.1% ^{A,H,K,M,N,P}	2,965	32.4% ^{A,B,D,H,K,M,N,P}	2,311	34.4% ^{A,B,D,E,H,K,L,M,N,O,P}	844	25.1%	
	Important	1,144	22.0%	1,991	21.8%	1,434	21.4%	758	22.5%	
	Neutral	1,283	24.7%	2,335	25.5%	1,589	23.7%	906	26.9% ^{C,I}	
	Low importance	516	9.9%	880	9.6%	567	8.5%	390	11.6% ^{G,I}	
	Not important	640	12.3% ^M	976	10.7%	808	12.0% ^M	471	14.0% ^{F,M,O,P}	
	Total	5,204	100.0%	9,147	100.0%	6,709	100.0%	3,369	100.0%	
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	2,203	42.4%	4,081	44.6% ^G	2,704	40.3%	1,477	43.9%	
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	2,988	57.6% ^{A,B,D,M,O,P}	5,067	55.4% ^{A,B,M}	4,001	59.7% ^{A,B,D,F,I,J,K,L,M,N,O,P}	1,889	56.1% ^{A,B,M}	
	Total	5,191	100.0%	9,148	100.0%	6,705	100.0%	3,366	100.0%	

Survey Item	Response	Finance, insurance, management of companies and enterprises (I)		Real estate and rental and leasing (J)		Professional, scientific and technical services (K)		Administrative and support, waste management and remediation services (L)	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
Do you believe B.C. should adopt year-round	Yes, BC should adopt year-round DST	9,284	92.3%	2,998	92.7%	17,347	92.9% ^D	1,996	93.3%
	No, BC should	779	7.7% ^{G,M,O}	237	9.3%	1,322	7.1%	144	6.7%

Survey Item	Response	Finance, insurance, management of companies and enterprises (I)		Real estate and rental and leasing (J)		Professional, scientific and technical services (K)		Administrative and support, waste management and remediation services (L)	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
observance of Daylight Saving Time?	continue to observe the bi-annual time change								
	Total	10,063	100.0%	3,235	100.0%	18,669	100.0%	2,140	100.0%
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	3,320	32.7% ^{A,B,D,H,K,L,M,N,O,P}	1,079	33.4% ^{A,B,D,H,K,L,M,N,P}	4,984	26.6% ^N	610	28.5% ^N
	Important	2,217	22.0%	703	21.7%	4,251	22.7% ^O	498	23.3%
	Neutral	2,402	23.8%	775	24.0%	4,816	25.8% ^I	594	27.8% ^{C,G,I}
	Low importance	898	8.9%	313	9.7%	2,186	11.7% ^{D,E,F,G,I,O}	198	9.3%
	Not important	1,240	12.4% ^{F,M}	365	11.3%	2,465	13.2% ^{F,M,O,P}	240	11.2%
	Total	10,077	100.0%	3,235	100.0%	18,702	100.0%	2,140	100.0%
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	4,483	44.5% ^G	1,426	44.1% ^G	8,095	43.3% ^G	998	46.6% ^G
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	5,586	55.5% ^{A,B,M,O}	1,809	55.9% ^{A,B,M}	10,610	56.7% ^{A,B,D,M,O,P}	1,143	53.4%
	Total	10,069	100.0%	3,235	100.0%	18,705	100.0%	2,141	100.0%

Superscript letters indicate that the proportion in this cell is statistically significantly higher (at the p<.05 confidence level) than the proportion in the same row, in the column letter indicated by the superscript letter.

Z-tests for differences in proportion were conducted at the p<.05 confidence level. Where appropriate, Bonferroni corrections for multiple comparisons were made.

By Occupation

Table D18: Attitudes towards Changing To Year-Round DST, by Occupation

Survey Item	Response	Management (A)		Business, finance, and administration occupations (B)		Natural and applied sciences and related occupations (C)		Occupations in health, education, law and social, community and government services (D)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Yes, BC should adopt year-round DST	20,741	93.0% ^J	24,277	92.6% ^J	6,924	92.1% ^J	42,979	93.3% ^{B,C,H,J}	
	No, BC should continue to observe the bi-annual time change	1,553	7.0% ^K	1,940	7.4% ^{D,F,K}	594	7.9% ^{D,F,K}	3,078	6.7%	
	Total	22,294	100.0%	26,217	100.0%	7,518	100.0%	46,057	100.0%	
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	6,881	30.9% ^{C,D,E,H,J,M,N,O}	8,120	30.9% ^{C,D,E,H,J,M,N,O}	1,740	23.1%	11,912	25.8% ^{C,E,J,M}	
	Important	4,695	21.1%	5,816	22.1%	1,873	24.9% ^{A,B,E,F,G,L,N,O}	10,880	23.6% ^{A,B,E,F,G,L,O}	
	Neutral	5,455	24.5% ^K	6,800	25.9% ^{A,K}	1,935	25.7% ^K	13,157	28.5% ^{A,B,C,F,G,I,K}	
	Low importance	2,312	10.4% ^{F,K}	2,540	9.7% ^K	992	13.2% ^{A,B,D,F,G,I,K,N,O}	5,202	11.3% ^{A,B,F,G,K}	
	Not important	2,951	13.2% ^{B,D,F,K,N}	2,995	11.4% ^K	993	13.2% ^{B,D,F,K}	4,940	10.7% ^K	
	Total	22,294	100.0%	26,271	100.0%	7,533	100.0%	46,091	100.0%	
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	9,823	44.1% ^K	11,873	45.2% ^K	3,329	44.2% ^K	22,453	48.7% ^{A,B,C,E,F,G,I,K}	
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	12,451	55.9% ^{D,H,J,L,M,N,O}	14,383	54.8% ^{D,H,J,M,N,O}	4,206	55.8% ^{D,H,J,L,M,N,O}	23,610	51.3% ^N	
	Total	22,274	100.0%	26,256	100.0%	7,535	100.0%	46,063	100.0%	

Survey Item	Response	Occupations in art, culture, recreation and sport (E)		Sales and service occupations (F)		Trades, transport and equipment operators and related occupations (G)		Natural resources, agriculture and related production occupations (H)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you believe B.C. should	Yes, BC should adopt year-round DST	5,720	93.3% ^J	13,372	93.6% ^{B,C,H,J,L}	15,275	93.2% ^J	3,284	91.8% ^J	

Survey Item	Response	Occupations in art, culture, recreation and sport (E)		Sales and service occupations (F)		Trades, transport and equipment operators and related occupations (G)		Natural resources, agriculture and related production occupations (H)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
adopt year-round observance of Daylight Saving Time?	No, BC should continue to observe the bi-annual time change	410	6.7%	917	6.4%	1,116	6.8%	295	8.2% ^{D,F,I,K}	
	Total	6,130	100.0%	14,289	100.0%	16,391	100.0%	3,579	100.0%	
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	1,346	21.9%	4,566	32.0% ^{C,D,E,H,J,M,N,O}	5,035	30.7% ^{C,D,E,H,J,M,N,O}	846	23.6%	
	Important	1,312	21.4%	3,102	21.7%	3,459	21.1%	835	23.3%	
	Neutral	1,901	31.0% ^{A,B,C,D,F,G,H,I,K,O}	3,755	26.3% ^{A,K}	4,063	24.8% ^K	946	26.4% ^K	
	Low importance	788	12.8% ^{A,B,D,F,G,I,K,N,O}	1,315	9.2% ^K	1,577	9.6% ^K	437	12.2% ^{B,F,G,I,K,N}	
	Not important	793	12.9% ^{D,F,K}	1,539	10.8% ^K	2,267	13.8% ^{B,D,F,K,N}	524	14.6% ^{B,D,F,K,N}	
	Total	6,140	100.0%	14,277	100.0%	16,401	100.0%	3,588	100.0%	
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	2,799	45.6% ^K	6,412	44.9% ^K	7,341	44.8% ^K	1,821	50.7% ^{A,B,C,E,F,G,I,K}	
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	3,341	54.4% ^{D,H,J,M,N}	7,869	55.1% ^{D,H,J,L,M,N,O}	9,054	55.2% ^{D,H,J,L,M,N,O}	1,771	49.3%	
	Total	6,140	100.0%	14,281	100.0%	16,395	100.0%	3,592	100.0%	

Survey Item	Response	Occupations in manufacturing and utilities (I)		Student (J)		Retired (K)		Unemployed (L)		Cont'd...
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Yes, BC should adopt year-round DST	2,478	94.1% ^{H,J,L}	3,986	86.6%	47,936	93.8% ^{A,B,C,H,J,L,O}	1,288	91.0% ^J	
	No, BC should continue to observe the bi-annual time change	155	5.9%	618	13.4% ^{A,B,C,D,E,F,G,H,I,K,L,M,N,O}	3,164	6.2%	128	9.0% ^{F,I,K}	
	Total	2,633	100.0%	4,604	100.0%	51,100	100.0%	1,416	100.0%	
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	784	29.7% ^{C,D,E,H,J,M,N}	959	20.9%	21,611	42.2% ^{A,B,C,D,E,F,G,H,I,J,L,M,N,O}	423	29.7% ^{C,E,H,J,M}	
	Important	605	22.9%	1,055	22.9%	12,717	24.8% ^{A,B,D,E,F,G,L,N,O}	274	19.3%	
	Neutral	659	25.0% ^K	1,317	28.6% ^{A,B,C,G,K}	9,835	19.2%	400	28.1% ^K	
	Low importance	246	9.3% ^K	694	15.1% ^{A,B,D,F,G,H,I,K,L,M,N,O}	3,515	6.9%	147	10.3% ^K	
	Not important	344	13.0% ^{D,K}	574	12.5% ^{D,K}	3,571	7.0%	179	12.6% ^K	
	Total	2,638	100.0%	4,599	100.0%	51,249	100.0%	1,423	100.0%	
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	1,134	43.0% ^K	2,317	50.4% ^{A,B,C,E,F,G,I,K}	19,113	37.3%	706	49.8% ^{A,C,F,G,I,K}	
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	1,504	57.0% ^{D,H,J,L,M,N,O}	2,282	49.6%	32,072	62.7% ^{A,B,C,D,E,F,G,H,I,J,L,M,N,O}	713	50.2%	
	Total	2,638	100.0%	4,599	100.0%	51,185	100.0%	1,419	100.0%	

Survey Item	Response	Maternity leave (M)		Homemaker (N)		Other, please specify (O)	
		Count	Column %	Count	Column %	Count	Column %
Do you believe B.C. should adopt year-round observance of Daylight Saving Time?	Yes, BC should adopt year-round DST	1,307	93.3% ^J	5,951	93.0% ^J	10,353	92.6% ^J
	No, BC should continue to observe the bi-annual time change	94	6.7%	449	7.0%	832	7.4% ^K
	Total	1,401	100.0%	6,400	100.0%	11,185	100.0%

Survey Item	Response	Maternity leave (M)		Homemaker (N)		Other, please specify (O)	
		Count	Column %	Count	Column %	Count	Column %
Time?							
How important do you think it is for BC to be aligned with neighbouring provinces, territories and states?	Very important	304	21.7%	1,664	26.0% ^{C,E,J}	3,004	26.8% ^{C,E,H,J,M}
	Important	334	23.8%	1,420	22.2%	2,363	21.1%
	Neutral	463	33.0% ^{A,B,C,D,F,G,H,I,K,O}	1,949	30.5% ^{A,B,C,F,G,H,I,K,O}	3,098	27.7% ^{A,B,G,K}
	Low importance	146	10.4% ^K	628	9.8% ^K	1,146	10.2% ^K
	Not important	156	11.1% ^K	732	11.5% ^K	1,585	14.2% ^{B,D,F,K,N}
	Total	1,403	100.0%	6,393	100.0%	11,196	100.0%
Washington, Oregon and California are considering year-round observance of DST. If these states implement the changes, what should BC do?	BC should decide independently what time observance is best for BC	728	51.9% ^{A,B,C,E,F,G,I,K}	3,312	51.9% ^{A,B,C,D,E,F,G,I,K,O}	5,401	48.3% ^{A,B,C,F,G,I,K}
	BC should change, as required, to align with how Yukon, Washington, Oregon and California observe time	676	48.1%	3,071	48.1%	5,786	51.7% ^N
	Total	1,404	100.0%	6,383	100.0%	11,187	100.0%

Superscript letters indicate that the proportion in this cell is statistically significantly higher (at the $p < .05$ confidence level) than the proportion in the same row, in the column letter indicated by the superscript letter.

Z-tests for differences in proportion were conducted at the $p < .05$ confidence level. Where appropriate, Bonferroni corrections for multiple comparisons were made.