

February 13, 2023

Good Afternoon Chair Pena-Melnyk, Vice Chair Kelly, and Members of the Health and Government Operations Committee,

I am Lisa VanBuskirk of Start School Later Maryland. Thank you for the opportunity to testify. This is my fourth year testifying in **opposition to permanent Daylight Saving Time, specifically HB-165**.

The goal of my all-volunteer organization is to educate communities and policy makers about the physical and mental health, safety, and academic benefits of age-appropriate school hours. My organization opposes permanent Daylight Saving Time because of the safety concerns regarding morning winter darkness and the negative impact on the circadian rhythm and health of every Marylander.

What is the difference between permanent Daylight Saving Time vs the status quo or permanent Standard Time at this time of year? It is the difference between sunrise on the opening day of the Maryland General Assembly being at 8:24 a.m. versus 7:24 a.m. If you came to Annapolis at 7:30 on the Opening Day under permanent DST, the State House would look like the photo on the left (below). If you came to Annapolis at 7:30 this year, the State House looked like the photo on the right (below). For the bill's February 15th hearing, sunrise is at 6:57 a.m. under Standard Time. A month into session and the daylight is already increasing in the morning and evening, but under permanent Daylight Saving Time, sunrise would only barely be before 8 a.m.





Photos taken by Lisa VanBuskirk, March 1, 2022-Comparision of Daylight Saving Time (left) vs Standard Time (right) at sunrise.

I acknowledge the negative health and social impacts society bears when we switch from Standard Time (ST) to Daylight Saving Time every March. The very day of my first testimony in opposition to permanent Daylight Saving Time in March 2020, many newspapers published stories about the negative effects of switching back and forth and the call by circadian scientists to move to permanent Standard Time and do away with Daylight Savings Time altogether, the complete opposite of this proposed legislation. In 2020, the Baltimore Sun Editorial Board opposed permanent DST. The latest sunrises of the year in Maryland occur in late

December through early January, which would be at about 8:25-8:39 a.m. depending on where you are in the state. Civil dawn, the 30 minutes or so before sunrise, when it is light enough to see without artificial illumination, would therefore begin at about 8 a.m. Supporters may argue that sunrise would only be that late for a few days, but sunrise would be after 8 a.m. from the end of November to the beginning of February.

Our circadian rhythm is regulated by sunrise, not sunset. A permanent delay of sunrise time would put all of us on a perpetual "social jet lag" which would be most noticeable in the winter. This would affect our physical and emotional health and well-being, but would be particularly exacerbated for adolescents, who already experience a well-documented delay in sleep and wake times. Permanent Daylight Saving Time, combined with the current too-early school start times, would have an even greater negative impact on adolescent circadian rhythm, safety, health, and academics, and is contrary to the intent of previous state legislation regarding school bell times, including 2014's HB 883 and 2016's HB39, both of which were sponsored by new Lieutenant Governor Aruna Miller.

As you probably saw in the news last spring, the U.S. Senate by unanimous consent, advanced the Sunshine Protection Act and permanent Daylight Saving Time for the nation.³ Unanimous consent is not quite the same as a unanimous vote though, and you as legislators, surely understand such a nuance. Following the Senate's action, there were quite a number of articles about Daylight Saving Time, many which noted the unpopularity of permanent Daylight Saving Time in 1974, extra impact on adolescent biology and school start times, and concerns about morning darkness and student safety, especially for northern states.

I appreciate the quote from then House Majority Leader and Maryland Representative Steny Hoyer in a 2022 article in Politico: "How are people going to feel at 7 o'clock in the morning in December, when they put their kids out on the street to catch the school bus, and it's dead, flat dark? In any event, I don't have strong feelings either way," Hoyer chuckled. "I happen to like daylight savings time, but I don't send a kid to school."

¹ https://www.wsj.com/articles/heres-why-health-experts-want-to-stop-daylight-saving-time-11583340645?fbclid=lwAR0YLjCfiS D7RMQi55jqaXYUuKUORnk-o5GmmiQCgdOKbzAkLJyijB1Wmc

² https://www.baltimoresun.com/opinion/editorial/bs-ed-0309-daylight-savings-blues-20200306o3dst4scwzchhgu7ywztuzpdk4-story.html

³ https://www.politico.com/news/2022/03/15/here-comes-the-sun-senate-moves-to-make-daylight-savings-time-permanent-00017451

⁴ https://www.politico.com/news/2022/03/15/here-comes-the-sun-senate-moves-to-make-daylight-savings-time-permanent-00017451

I would, however amend Representative Hoyer's quote to acknowledge that some school days in Maryland it will be dead, flat dark at 8 a.m. when parents are putting students on buses. When people say they like Daylight Saving Time, I think they mean they like the switch in March because it comes at a time when the day is lengthening quickly anyways and they appreciate spring sunshine, they rarely consider the potential for dark winter mornings.

Last year, the Maryland Association of Boards of Education opposes permanent Daylight Saving Time. ⁵ I assume they will submit similar opposition this year. Likewise, I know Anne Arundel County Public School opposed permanent Daylight Saving Time the past two years and hope that they again submit testimony. ⁶ This school year, Anne Arundel County implemented new school hours aligned with student biology. Permanent Daylight Saving time would negate the Board's action, which was nearly three decades in the making. Similarly, next week Howard County's Board of Education will vote on new school start and dismissal time after 25 years of discussion, to align with adolescent circadian rhythms. Likewise, this bill would negate their effort.

HB-165 requires adjacent states to also pass permanent Daylight Saving Time legislation. Delaware passed such legislation in 2019. In the 2022 legislative session, Pennsylvania considered legislation for both permanent Standard Time and permanent Daylight Saving Time, while Virginia and West Virginia considered legislation for permanent Standard Time. None of the 2022 bills were enacted. Last month, Virginia's Senate defeated SB-1017, a permanent Daylight Saving Time bill. Our surrounding states, like the rest of us, have mixed opinions on which clock to keep.

In 1974, the entire nation tried permanent Daylight Saving Time, but it was a disaster with the extra morning darkness. The deaths of eight children in Florida and one in Connecticut were blamed on unsafe DST morning darkness within the first month. Congress reversed its decision later that same year. Enclosure 1 and 2 are articles from the Baltimore Sun covering the 1974 DST fiasco. In 1974, Anne Arundel County Public Schools and Baltimore County Public Schools delayed their school start times by 30 minutes due to safety concerns and several "near-miss" accidents (Enclosure 3, 4, and 5).

Forty-nine years later, Maryland's schools start even earlier and many Maryland students of all ages already have bus pick-ups well before Civil Dawn under Standard Time. The average middle school start time is now 8:15 and the average high school start time is 7:56 a.m. Both levels have schools that start between 7:00 a.m. and 9:30 a.m. Most elementary schools start later in the morning, but there are elementary schools that start as early as 7:30 a.m. and as late as 9:30 a.m.⁷ I took the liberty of comparing winter sunrise to school start times across Maryland. You can see the chart in Enclosure 6, nearly all middle and high schools, plus a fair number of elementary schools would start before sunrise under permanent DST. It is not just the school bell time we ought to consider, but the fact that so many more Maryland students will be picked up by a bus or walk to school in the dark during the winter. This is a safety issue.

⁵ https://www.mabe.org/wp-content/uploads/2022/03/SB-534.Daylight-Savings-Time.pdf

⁶ https://mgaleg.maryland.gov/cmte_testimony/2022/hgo/1fkTcfacyrKCMm_luo2smEWOk1DgbLBwh.pdf

⁷ https://www.startschoollater.net/md---statewide.html see multiple graphics with list of all middle and high school start times and bell times relative to Orange Ribbon criteria.

When Massachusetts studied the permanent DST issue in 2017, their report made two caveats to the implementation of what they called Atlantic Time; community education and later school start times. As the Massachusetts report acknowledges "One way to avoid the downsides of year-round DST for school-aged children would be to delay school start-times until after there is sufficient daylight for safe travel." Many Maryland students ride buses for an hour, coupled with having to be at the bus stop 10 minutes early and arriving 15-30 minutes before the bell. We must take into account the impact of permanent DST on their safety during their dark commute before their pre-sunrise school start time.

Just as the list of groups that support age-appropriate start times continues to grow, so does the list of groups opposed to permanent DST. They include the American Academy of Sleep Medicine, National Safety Council, American Medical Association, and the National PTA which "... is opposed to daylight saving time during the winter months because of the safety factor." ⁹ 10 11

Please vote for an Unfavorable Report on HB-165, amend the bill to Permanent Standard Time, or amend the bill to include a mandate for a minimum safe, healthy, and age-appropriate start time for <u>all</u> schools.

Thank you,

Lisa E Van Buskirk

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Enclosure (1) - The Baltimore Sun, January 29, 1974

Enclosure (2) - The Baltimore Sun, October 29, 1981

Enclosure (3) - The Baltimore Sun, January 5, 1974

Enclosure (4) - The Baltimore Sun, January 8, 1974

Enclosure (5) - The Baltimore Sun, January 8, 1974

Enclosure (6) – Permanent Daylight Saving Time vs Maryland Public School Start Times

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⁸ https://www.ctnewsjunkie.com/upload/2017/11/Special Commission Commonwealths Time Zone.pdf

⁹ https://www.washingtonpost.com/lifestyle/wellness/sleep-daylight-saving-time-end/2020/08/28/213d3a0c-e8b8-11ea-bc79-834454439a44 story.html

¹⁰ https://www.washingtonpost.com/science/2019/03/08/springing-forward-daylight-saving-time-is-obsolete-confusing-unhealthy-critics-say/

¹¹ https://www.ama-assn.org/press-center/press-releases/ama-calls-permanent-standard-time

Enclosure (1)

The Baltimore Sun, January 29, 1974

A mere three weeks after permanent Daylight Saving Time began, "...the small savings in energy that we will make do not justify the loss of lives of our children, nor the hardship placed upon our children and their parents...the lives of our children should receive first consideration."

Bids to kill daylight

By ALBERT SEHLSTEDT, JR.

Washington Bureau of The Sun

Washington-There were serious moves in Congress yesterday to repeal year-around daylight saving time, which went into effect only three weeks ago as an energy-saving measure.

Congressmen in both houses expressed concern over schoolchildren who have been endangered on roads and highways during the dark morning hours of winter.

In Florida, a special session of the state legislature was scheduled for today so that clocks could be turned back an schoolchildren Eight have been killed in pre-dawn accidents there.

"The inescapable conclusion to be reached is that darkness had a great deal to do with the pre-dawn deaths," said Gov. Reubin Askew, who called the See DAYLIGHT, A4, Col. 1

Children's deaths spur bid to repeal daylight saving

one-day session solely to deal per (D., Fla.), who, along with with the daylight saving time most of the Florida delegation,

Marlow W. Cook (R., Ky.) rose in energy that we will make do in support of repealing the not justify the loss of lives of year-round daylight saving our children nor the hardship plan, cleared by Congress De- placed upon our children and cember 14, and cited the Flor- their parents. ida deaths, plus a reported increase in sexual assaults on youngsters in Minnesota and that would be saved in the problems in other states.

Iowa), sponsor of one of the lives of our children should bills to repeal the daylight receive first consideration.' measure, said it was the No. 1 Forecasts of energy savings issue he confronted when trav- with daylight time appear to eling in his home state during have been exaggerated, acthe Christmas recess.

nize we may well have made a subject yesterday that the Fedmistake," Senator Clark told eral Power Commission has his colleagues.

8 bills in House

pealer, said the daylight bill been hoped for. passed in December had little If Congress does, indeed, in-depth study.

Mike Mansfield (D., Mont.), for the winter months, much of said he was appalled by the the problem that the new law Florida deaths and urged the created is already behind the Senate Commerce Committee nation. to give repeal legislation its. The sun is rising earlier immediate consideration.

Capitol, there are eight bills morning before the repealers before the Commerce Commit- are approved by the appropritee calling for the repeal of ate congressional committees All have been introduced since given adequate advance warncongressmen returned from ing to change their schedules, their home districts to Wash- and the legislation is finally ington January 21.

DAYLIGHT, from Al | Representative Claude Pepis supporting repeal, said last In the United States Senate, week that "the small savings

"I regret for others their loss of benefit from energy country and from extra time Senator Dick Clark (D., at the end of the day, but the

cording to Senator Clark. He "I think it's time we recog- said in a floor speech on the estimated that only two-tenths of 1 per cent of this month's fuel savings could be attrib-Senator Robert Dole (R., uted to daylight time. Savings Kan.), also sponsoring a re- of from 1 to 3 per cent had

conclude that it made a mis-The majority leader, Senator take in enacting daylight time

each day and light could be On the House side of the over most of the country in the winter daylight saving time. and transportation agencies are enacted into law.

The Baltimore Sun, October 29, 1981.

Two months were added to Daylight Saving Time. Regarding the 1974 permanent DST, "Mr. Ottinger acknowledged there was an increase in child fatalities during the winter months through February..."

More daylight time voted

Washington (AP)—The House voted yesterday to extend daylight saving time from six to eight months a year over objections that the time change would jeopardize the safety of tens of thousands of school children.

The 243-165 vote came as supporters said the change, adding March and April to the daylight saving time months, would save energy because there would be more daylight during the time people are awake and need it.

Critics, especially rural congressmen, challenged that, saying more, not less, energy would be used. That plus the fear that school children would be forced to go to school in the dark could force many rural states to drop daylight saving time altogether, they argued.

The action by the House, which still must be approved by the Senate, reverses a decision the House made in 1976 when it rejected a similar proposal.

Under the plan, daylight saving time would be initiated on the first weekend in March rather than the last weekend in

April. At that time clocks would be moved ahead one hour, yielding more daylight in the evening and less in the morning. Clocks would be turned back an hour on the last weekend of October, the same time they are adjusted under the current law.

Representative Richard L. Ottinger (D, N.Y.), who sponsored the bill, said government studies of the 1974-1975 period, when the United States had year-round daylight saving time, showed energy savings of 100,000 barrels of oil a day in March and April and no increase in child fatalities.

Mr. Ottinger acknowledged that there was an increase in child fatalities during the winter months through February, but not in March or April.

The House plan would retain provisions for any state entirely within one time zone to opt out of the entire daylight saving system, as Arizona has. But the House rejected a proposal that would have let any state avoid going onto daylight saving time for only the two additional spring months.

Enclosure (3)

The Baltimore Sun, January 5, 1974

Anne Arundel County Public Schools delays all opening and closing times of schools 30 minutes to recoup savings in electricity, as a result of the shift to permanent Daylight Saving Time.

"The AAA said millions of pedestrians will be on the streets in partial or total darkness during morning hours, including children on their way to school."

Daylight saving prompts rundel school shift

announced it will alter schedules significantly as the nation turns its clocks ahead an hour tomorrow in converting to Daylight Saving Time.

Anne Arundel officials said night. vesterday that all opening and closing times of schools, school offices and school-related activities would be reschuled one-half hour later than nor-time since World War II. mal, beginning Monday.

Schools in Baltimore city and county, and in Howard counties said Harford in any scheduled-times.

nation through October, 1975. children The White House has said school.

Only one county in the Balti- the switch could cut back the more metropolitan area has demand for heating and electricity by as much as 3 per cent-particularly in the northern regions of the country-because people will not need to turn on their lights as early at

> The change over at 2 A.M. tomorrow will mark the first time the nation has gone on vear-round Daylight Saving

The switch to daylight time could create some problems for drivers, the American Automobile Association said. The there were no changes planned AAA said millions of pedestrians will be on the streets in par-Daylight time will remain in tial or total darkness during effect -throughout most of the the morning hours, including their way to

Enclosure (4)

The Baltimore Sun January 8, 1974

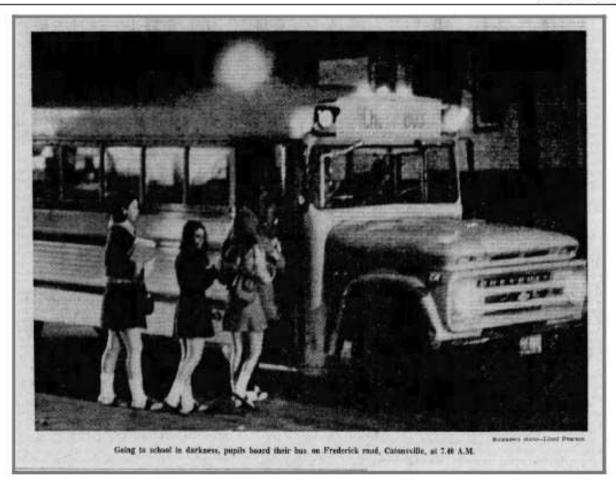
Cover Photo

"Going to school in darkness, pupils board their bus on Frederick Road, Catonsville. 7:40 A.M."



The Baltimore Sun (Baltimore, Maryland) · 8 Jan 1974, Tue · Page 1

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Enclosure (5)

The Baltimore Sun January 8, 1974

"No injuries were reported in the Baltimore area, although county police advised school authorities that there had been some "close shaves" at school crossings."

"...most calls came from parents of high school and junior high school girls...Dundalk Senior High and Delaney Senior High, for example begin classes at 8 A.M. and 8:05 A.M. about a half hour before sunrise at 8:30 A.M." *These two high schools now start at 7:45 a.m.

> The Baltimore Sun (Baltimore, Maryland) · 8 Jan 1974, Tue · Page 1 Downloaded on Feb 17, 2021

County schools to start later as protests swell

By MIKE BOWLER

school crossing guards, Baltimore county school officials yesterday delayed morning bus and class schedules one-half hour.

The new schedule, effective tomorrow morning through istration buses. Friday, February 15, was anafter officials said they rewho saw their children set out first day of year-round Daylight Saving Time.

more Archdiocese said yester- pre-school hours." day there were no plans to alter the schedules schools in the area.

day began a one-half hour See DAYLIGHT, A5, Col. 1

Flooded with calls from anx- later starting time. City school parents and harried officials, who checked with other urban districts on the East Coast, said they would stick with regular schedules. Almost all city schoolbus riders use Mass Transit Admin-

After receiving a call from a nounced yesterday afternoon Baltimore county motorist who said he had narrowly missed ceived hundreds of calls from hitting a group of students concerned and angry parents waiting for a bus before dawn yesterday, James A. Sensenfor school in darkness on the baugh, the state school superurged Maryland intendent. drivers to "drive with extreme A spokesman for the Balti-caution during the morning

In Maryland and across the of parochial nation, school switchboards were buzzing as the energy-Anne Arundel county yester- saving measure went into ef-

County schools to start later in wake of protests

ballions, from Al police department formally re-shortest day of the winter quested in. They said some shortest day of the winter.

authorities that there had been some "close shaves" at school crossings. A teen-aged girl in Seymour, Conn., was struck and killed by a car as she walked to school shortly after 7 A.M.

Crossing guards in Salt Lake City, where surrise was at 8.52 A.M., were issued flashights.

A Baltimore county school spokesman sald most calls came from the parents of high school and jamor high school girls. Bus routes in the county are designed so that high school students are picked up first, then elementary students, most of whom begin school at 9 A.M.

A.M. Dundals Senior High and Du-shead a full hour. lancy Senior High, for exam-ple, began classes at 8 A.M. their teen-agers had never had and 8.65 A.M., about a half-crouble in the darkness at the \$30 A.M.

Afternoon schedules in the county are not affected, mean-ing that students will get a half-hour "vacation" each day half-heur "vacation" each day until February 15. This course on top of five energy-saving and snow days that had been included in the schedule and will not be made up, said forbert Y. Dubel, deputy super-intended. intendent.

Mr. Dutiel said the aftermost schedule was not changed be-cause many bus drivers have other jobs that could be disby an extension of rupted school hours.

We made the change for

DAYLIGHT, from Al | two ressens," he said. "The shortest day of the winter.

No injuries were reported in the Baltimore area, although time and some close county police advised school staves. We also got an unbesting that there had been concerned phone's been ringing all day."

Schoolchildren, of course, were not the only ones affected by the time change. Adults had to leave for work in the dark and the traffic jam on the Jones Falls expressway curred on achedule-in the dawn's early light.

calls bered long, early morning walks to class in their own school days, scaffed at the delayed openings. "I caught the bus in the dark when I was growing up, and I didn't mind," said Robin Poling of Clarksburg. W.Va., were moved

before sunrise at about other end of the day. "I know I could never keep mine home at night," said Mr. Dubel.





Permanent Daylight Saving Time vs Public School Hours in Maryland*

Under permanent Daylight Saving Time, the latest winter sunrise in Maryland, would be between 8:25-8:35 a.m., depending on location.

Civil Dawn is the approximately 30 minutes before sunrise, when it is possible to see without artificial illumination.

How much earlier before sunrise or civil dawn, are students waiting for buses or walking to school?

RED = School starts before winter sunrise. GREEN = Start times after winter sunrise.

County/School District	HS start time or start ranges	MS start time or start ranges	ES start time or start ranges
Allegany County	7:40	7:40	8:00 to 8:45
Anne Arundel County	8:30	9:15	8:00 to 8:30
Baltimore City	7:30 to 9:00	7:30 to 9:15	7:30 to 9:15
Baltimore County	7:10 to 7:45	7:40 to 8:30	8:35 to 9:20
Calvert County	7:25 to 7:40	7:22 to 8:25	8:30
Caroline County	7:50	7:40	9:00
Carroll County	7:30	8:25 to 8:35	7:45 to 9:30
Cecil County	7:40	7:50-8:10	9:00
Charles County	7:25 to 8:05	7:45 to 8:50	8:30 to 9:30
Dorchester County	7:50 to 8:15	7:55 to 8:05	8:30 to 9:00
Frederick County	7:30	8:00	8:20 to 9:00
Garrett County	8:25	8:30	8:15 to 8:40
Harford County	7:30	8:15	9 to 9:30
Howard County	7:25	7:40 to 8:25	8:15 to 9:25
Kent County	7:45	8:40	8:00 to 9:00
Montgomery County	7:45	7:55 to 8:15	9:00 to 9:25
Prince George's County	7:45 to 9:30	7:45 to 9:30	7:45 to 9:15
Queen Anne's County	7:35	7:45	7:30 to 8:55
Somerset County	7:30	7:20	8:00
St Mary's County	8:00	7:05 to 7:55	8:25 to 9:00
Talbot County	7:45 to 7:50	7:45 to 7:50	8:40
Washington County	8:45	7:20 to 8:45	7:30 to 9:15
Wicomico County	7:45	7:45 to 9:15	8:15 to 9:15
Worcester County	7:48 to 8:07	7:30 to 8:00	7:45 to 8:30

^{*} based on 2022-2023 school start time data collected by SSL Maryland

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