

SB92_IndivisibleHoCoMD_FAV_AlecWeinberg.pdf

Uploaded by: Alec Weinberg

Position: FAV



SB92 – Department of General Services – Energy–Conserving Standards (Maryland Sustainable Buildings Act of 2023)

Testimony before

Senate Education, Energy & Environment Committee

February 2, 2023

Position: Favorable

Mr. Chair, Madame Vice Chair and members of the committee, my name is Alec Weinberg, and I represent the 750+ members of Indivisible Howard County. We are providing written testimony today ***in support of SB92***, which would save bird deaths while making our buildings more energy efficient. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We appreciate the leadership of Sen. Lam for sponsoring this important legislation.

I support this legislation for two reasons: saving birds, and saving energy.

Birds are essential to the health of our ecosystems. They are predators, prey, seed dispersers, scavengers, and pollinators. The natural resources we depend on depend significantly on birds. Yet since 1970 we've lost 29% of all North American birds - one billion a year due to collisions with windows. This bill would prevent 90% of bird deaths at each bird-safe building.

The climate crisis is also destroying ecosystems. According to the World Health Organization, climate change is the number one health threat facing humanity, already causing thousands of extra deaths each year due to malnutrition, malaria, diarrhea and heat stress. Energy efficient windows would decrease our energy consumption, and reduce greenhouse gas emissions.

Thank you for your consideration of this important legislation.

We respectfully urge a favorable committee report.

Alec Weinberg
Columbia, MD 21045

Maryland Sustainable Buildings Act- Testimony of A

Uploaded by: Anne Lewis

Position: FAV

Testimony of
Anne Lewis, FAIA
President, City Wildlife, Inc.
in support of the
Maryland Sustainable Buildings Act of 2023 – SB92 and HB6
MD General Assembly
February, 2023

City Wildlife is pleased to have this opportunity to submit favorable testimony in support of the Maryland Sustainable Buildings Act of 2023.

City Wildlife is a non-profit organization in the District of Columbia that has run the city's *Lights Out DC* program for twelve years. Volunteers for this program monitor glass buildings in part of the downtown area and collect the dead and injured birds they find at these buildings. Since 2010, we have documented more than 4,500 bird strikes in just this small downtown area. 85% of these collisions were fatal, and these numbers are increasing every year as more and more glass buildings are built.



Some victims of bird/glass collisions 2021
City Wildlife, Inc.

Nationally, up to one billion birds are killed each year in glass collisions.

The victims of these collisions are mostly neo-tropical migrants -- beautiful birds -- many of whose populations are in serious decline. Since 1970, North America has lost 29% of its breeding birds, and bird/glass collisions are one of the most significant sources of fatality for these valued and dwindling species. DC and Maryland are on the Atlantic Flyway for migrating birds, so our buildings need to be especially bird-safe. But unfortunately, they are not, and thousands of birds are being killed in our region every year.

Many jurisdictions have already passed laws mandating bird-safe design. Maryland lags behind. New York City's Local Law 15, passed in 2020, requires most new buildings -- and any existing building that is replacing all of its exterior glass -- to be bird-safe. In December of 2022, the DC Council unanimously passed a similar law for the District of Columbia. If approved by Congress, the District's law will take effect on October 1, 2024. Other jurisdictions already have bird-safe laws on the books, including San Francisco, Portland, Toronto, and the states of Illinois and Minnesota. Also, the US House of Representatives has introduced a law requiring GSA's federal buildings to be bird-safe.

It is time for Maryland to follow suit and pass its Sustainable Buildings Act.

The techniques to prevent bird/glass collisions are well-known, and bird-safe design is not expensive. Adding bird-safe glass to a project generally adds only one-tenth to one-half of one percent to the overall construction cost, and ample studies to prove its effectiveness.

In addition, bird-safe measures can significantly reduce energy costs through lighting reductions and reduced heating and cooling costs. The DC Court of Appeals has reduced its atrium lighting costs by 15% -- and the Thurgood Marshall Judiciary Building by 28% -- just by dimming their atrium lights to save birds.

Bird-safe design is effective. In 2016, one of DC's problem buildings, the Washington Convention Center, installed bird-safe film at its L Street overpass, a feature that was killing many birds. The results have been dramatic: to date, we have seen an 85% reduction in bird strikes at this overpass. What's more, the film is nearly invisible. But it is always less expensive to construct a bird-safe building at the outset than to retrofit one.

These bird strikes take a human toll. In the spring of 2018 at a DC elementary school, 53 Cedar Waxwings collided with glass along a corridor over a period of several days. The teachers said the children were so traumatized that they had to be kept away from the corridor because it upset them too much to see the birds hitting the glass and dying on the ground. Many adults, too, have described how disturbing it is to see a bird hit a window -- an all-too-common experience that can make people dread coming to work. Bird-safe design can greatly reduce these sad events.

We are thrilled that Maryland is considering this legislation and strongly support its passage. Establishing requirements for state-owned or operated buildings will be highly effective, setting an important and highly visible standard for private construction to follow.

I am pleased to have been able to write in support of this legislation would be glad to provide any information that might be helpful about our bird-collision data or experiences.

Respectfully submitted,
Anne Lewis, FAIA
President, City Wildlife, Inc.
3400 Reservoir Road NW
Washington, DC 20007
anne.lewis@citywildlife.org

SB92 Sustainable Buidlings 2023 sign on testimony

Uploaded by: Carolyn Parsa

Position: FAV



MARYLAND LEAGUE OF CONSERVATION VOTERS

NAACP Maryland STATE CONFERENCE



Audubon

MID-ATLANTIC



Maryland Conservation Council
Protecting Maryland's Natural Heritage Since 1969



BLUE WATER BALTIMORE



Baltimore Jewish Council
An agency of The Associated



NATIONAL AQUARIUM®



Bill Title: SB92—Department of General Services—Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023)

Bill Sponsor: Senator Clarence Lam

Committee: Education, Energy, and the Environment

Position: Support

Date: February 2, 2023

Community in SUPPORT of Maryland Sustainable Buildings Act of 2023

We, the undersigned organizations, support enacting the Maryland Sustainable Buildings Act of 2023 to ensure Maryland continues to be a national leader in energy efficiency and biodiversity conservation—helping achieve the goals set out in the transformational 2022 Climate Solutions Now Act.

This bill would require all newly built, acquired, or renovated buildings receiving 51% Maryland State funding to follow standards for bird-friendly windows and shielded nighttime lighting, which will both conserve energy and save birds. This is of urgent need right now as we face climate change impacts and continue to lose one billion birds each year to collisions with window glass in the United States. These birds are part of our healthy breeding populations and their losses are unsustainable, as witnessed by the 29% reduction in bird numbers since 1970. Every year that bird populations decline, we lose valuable services in pollination, seed dispersal, and pest insect consumption. Birds are also critical to Maryland’s tourism industry. Wildlife watching in Maryland generates over \$450 million in economic activity annually in the state.

Many jurisdictions have already passed similar legislation around the world and in the United States, including New York City, Illinois, and recently The DC Council just passed a bird-friendly bill and the Mayor has signed it. In 2020, Howard County became the first county in Maryland to pass bird-friendly building legislation.

This is a common-sense bill, where scientists and builders have come together to find proven solutions, which will save the state money over time. The methods to protect birds are codified as a Leadership in Energy and Environmental Design (LEED) Innovation Credit by the U.S. Green Building Council. Currently, builders and architects may use this credit to meet LEED certifications, but the credit is optional and we need this bill to make it mandatory.



This bill is a win-win both saving birds and saving energy. Passage is urgently needed to address the increased use of large glass windows in buildings that threatens to undo energy conservation efforts, cost the state money, and contribute to climate change.

We urge a **FAVORABLE** report for this bill.

Signed,

Safe Skies Maryland

Maryland Ornithological Society

Maryland Native Plant Society

NAACP Maryland

Audubon Mid Atlantic

Unitarian Universalist Legislative Ministry of Maryland

Baltimore Jewish Council

Maryland League of Conservation Voters

Blue Water Baltimore

Maryland Campaign for Environmental Human Rights

Chesapeake Bay Foundation

National Aquarium

Indivisible HoCo Maryland

Climate Justice Wing

Maryland Legislative Coalition

Maryland Conservation Council

The Nature Conservancy

Audubon Society of Central Maryland

American Bird Conservancy

DC Voters for Animals

SAFE Saving Animals from Extinction—North American Songbirds

City Wildlife

Forever Maryland

Clean Water Action

Annapolis Green

Capital Nature

Friends of Quincy Run

Dr Chris Swan Testimony in Support of SB92.pdf

Uploaded by: Christopher Swan

Position: FAV

Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023) – SB 92

TESTIMONY OF DR. CHRISTOPHER SWAN -- **SUPPORT**

I am a waterfowl hunter who strongly support this bill as an important step for maintaining waterfowl populations important for my recreation, the economic vitality of local communities, and the quality of life on the Eastern Shore of Maryland.

This bill would require all newly built, acquired, or renovated buildings receiving 51% Maryland State funding to follow standards for bird-friendly windows and shielded nighttime lighting, which will both conserve energy and save birds. This is of urgent need right now as we face climate change impacts and continue to lose one billion birds each year to collisions with window glass in the United States.

These birds are part of our healthy breeding populations and their losses are unsustainable, as witnessed by the 29% reduction in bird numbers since 1970. Every year that bird populations decline, we lose valuable services of hunting, pollination, seed dispersal, and pest insect consumption. Birds are also critical to Maryland's hunting and tourism industry. In 2011, waterfowl hunters spent \$14 million in Maryland as one of the nation's premier waterfowl hunting destinations.

This is a common-sense bill, where scientists and builders have come together to find proven solutions, which will save the state money over time. The methods to protect birds are codified as a Leadership in Energy and Environmental Design (LEED) Innovation Credit by the U.S. Green Building Council. Currently, builders and architects may use this credit to meet LEED certifications, but the credit is optional and we need this bill to make it mandatory.

Maryland has a chance to act locally to save money, fight climate change, and reduce the unsustainable deaths of economically important birds. Waiting even one year will see more glass buildings built and more money lost, more greenhouse gas emissions, and more birds dying.

Respectfully Submitted,

Christopher M. Swan, Ph.D
Professor
Environmental Science
University of Maryland, Baltimore County
&
Waterfowl Hunter
Columbia MD 21045

SB092_djung_fav.pdf

Uploaded by: Deb Jung

Position: FAV



Howard County Council

Deb Jung
Councilmember

District 4

George Howard Building
3430 Court House Drive
Ellicott City, Maryland 21043-4392

February 2, 2023

SB092

Deb Jung

Howard County Council

FAVORABLE

Dear Chair Senator Feldman, Vice Chair Kagan, and Members of the Senate Education, Energy, and Environment Committee:

Thank you to Senator Clarence Lam for sponsoring this bill.

In 2020, I sponsored Howard County Council Bill 11 that required all commercial and County buildings to incorporate LEED Pilot Credit #55 which includes bird-safe building design standards. My interest in the bill came about thanks to the advocacy efforts of Mark Southerland of the Sierra Club and an elementary school Lego Robotics team that promoted bird-safe buildings as their research project. The bill was crafted with the involvement of the County's Office of Community Resources & Sustainability, the Natural Resources Division, and the Department of Inspections, Licenses, & Permits.

My bill was unanimously supported by all four of my Council colleagues, including our Republican Councilmember, and demonstrates that adoption of the bird-safe LEED credit can garner bipartisan support.

The Natural Resources Division had conducted bird strike counts on County buildings that supported the need for a reduction of transparent and reflective glass in building construction. The Robinson Nature Center, which is a County-owned building promoting environmental education and access, recently received retrofitting funding to address problematic areas of the building to reduce bird collisions. No current County buildings have been built since the passage of the law.

6300 Merriweather in Downtown Columbia will be the first commercial building in the County to boast bird-safe features. This building is currently in the planning phase and is the latest in the Howard Hughes portfolio envisioned as a 16-story, 250-foot tall office building scheduled for completion in 2025. The building theme is a modern "treehouse" with stacked glass levels

encased in recycled materials. The building features bird-safe elements so that the built environment can both mimic and protect nature.

Residential buildings also present significant hazards to birds but I didn't address this problem in my bill as I felt that systematic change required cautious implementation to ensure that commercial products are available to meet the LEED credit requirements.

Bird-safe building design is a vital component of supporting the General Assembly's Climate Solutions Now Act of 2022 and is a feasible construction option for public buildings. SB092 is a reasonable and responsible step towards fulfilling our environmental pledge to the residents of this State.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in blue ink that reads "Deb Jung". The signature is written in a cursive, flowing style.

Deb Jung
Councilmember, District 4

SB92_CleanWaterAction_Support_EmilyRanson.pdf

Uploaded by: Emily Ranson

Position: FAV

**SB92/HB6: Department of General Services - Energy-Conserving Standards
(Maryland Sustainable Buildings Act of 2023)**

House Health and Government Affairs & Appropriations Committees
Senate Education, Energy, and the Environment Committee

Positon: Favorable

Dear Members of the Committees,

Clean Water Action supports the Maryland Sustainable Buildings Act of 2023 as a method of reducing energy consumption and better protecting our birds.

This legislation impacts GSA state-funded projects, and requires that the projects include wherever practical energy-conserving features that are also bird-safe features. These practices reduce solar heat gain, lower the cost of heating and cooling, and also protect resident and migratory birds from building-strikes.

The practices, like requiring motion-sensor and/or down-shielded lights also limit unnecessary nighttime light pollution and reduce energy consumption as well.

We appreciate the hard work that both the House and Senate put into this legislation in previous years, and ask for a favorable report to both reduce energy consumption and reduce the number of birds that hit buildings.

Thank you,

Emily Ranson
Clean Water Action
eranson@cleanwater.org

ISEWOP Senate Version.pdf

Uploaded by: Felix Baum

Position: FAV

Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023) – HB 6

TESTIMONY OF FELIX BAUM – **SUPPORT**

My name is Felix Baum, I'm a sophomore at Mt. Hebron High School. I was a part of the Anglerfish Overlords, a Lego robotics team of 4th graders focused on bird safe building practices. The theme for that year's project was "Animal Allies", tasking us with finding a unique problem relating to animals, and an innovative solution. We talked to a concerned activist who counted, one by one, the dead bodies of birds who had struck the reflective glass of the Baltimore Convention Center. We realized that reflective glass, seen so often in modern architecture across the world, was leading one billion birds to their deaths- PER year. We realized the problem with bird strikes was much bigger than the birds themselves, but what such drastically decreased populations did to natural food and supply chains. These strikes were harming the ecosystem, and at an alarming volume. It wasn't just a problem for that specific Convention Center, at that specific time, but rather a problem across the country, and one that was going to continue into the future, unless changes were made. So we talked to state and local representatives, consulted experts (like Dr. Southerland), and thought of ways to prevent fatal bird strikes. We presented our findings and project summary at the Lego League State Championship that year, and we won third place for the project! That was 6 years ago. Since then, Howard County, my home county, passed CB11 2020, requiring new commercial and government construction in Howard County to be LEED certified for bird-safe designs. I testified at the Public Hearing. I told my story, I spoke for my classmates and my peers, and the law took effect not long after it was passed. That was 3 years ago. The problem isn't over. One billion birds per year now could easily be one billion dollars per year later. It's far beyond an unacceptable number- it's one that threatens our natural world's future- the world in which myself and other young people will continue to grow up in. We care about the world we are going to inherit, and this is a problem that has no place there. It isn't just about birds, and it isn't just about the climate. This is a fight for change- a fight for a world that you would want the future generations to live in. Be that change.

AudubonMidAtlantic_SB92_Sustainable Buildings Act.

Uploaded by: Jim Brown

Position: FAV



Maryland Office
Patterson Park Audubon Ctr
2901 E. Baltimore St
Baltimore, MD 21214

February 2, 2023

To: Maryland Senate Education, Energy, and the Environment Committee

From: Jim Brown, Policy Director, Audubon Mid-Atlantic

Subject: Favorable Testimony for Maryland **SB 92 Maryland Sustainable Buildings Act of 2023**

Good Afternoon. My name is Jim Brown. I am the policy director for Audubon Mid-Atlantic, here in Maryland. Audubon Mid-Atlantic is the regional office of National Audubon Society, representing over 35,000 Marylanders who advocate for the protection of birds, bird habitat, and policies aiming to protect both birds and human communities in the face of increasing environmental challenges, habitat loss, pollution, and climate change.

Audubon Mid-Atlantic enthusiastically supports SB92 – Maryland Sustainable Buildings Act of 2023. The building provisions in this bill will save birds lives. What is good for birds is good for the people, ecosystems, and economies of Maryland. Specifically, SB 92 requires energy efficiency and bird safety design practices. These methods to protect birds are already codified as an optional LEED Innovation Credit by the U.S. Green Building Council. SB 92 will make it mandatory on state funded buildings, setting a precedent for sustainable and eco-friendly building design in Maryland.

Window collisions are a leading factor in the decline of North American bird populations—in the United States we lose one billion birds each year to collisions with window glass. In Maryland these collisions occur in urban, suburban, and rural areas. SB 92 will increase protections for both for migratory and resident birds. Birds have numerous benefits to both the environment and economy. Every year that bird populations decline, we lose valuable services in pollination, seed dispersal, and pest insect consumption. Birds are also critical to Maryland’s tourism industry. Wildlife watching in Maryland generates over \$450 million in economic activity annually in the state.

The Science tells us:

- Collisions with glass buildings kill birds
- Buildings with less glass are more energy efficient
- Reducing the amount of glass in new buildings will increase energy efficiency and save millions of birds’ lives each year

The Maryland Sustainable Buildings Act of 2023 will also ensure our state continues to be a national leader in climate policy and energy efficiency—helping achieve the goals set out in the transformational 2022 Climate Solutions Now Act. Howard County has become the first jurisdiction to pass bird-friendly building legislation in Maryland. New York City and the State of Illinois have also recently passed similar laws to save birds and increase energy efficiency. Last year, the D.C. Council passed a bird-friendly bill

that the mayor signed into law this week, and under the Biden administration, the General Services Administration now includes bird-friendly standards in its guidelines for federal buildings.

Audubon Mid-Atlantic urges a favorable review of SB92—for the benefit of Maryland’s residents, birds, and ecosystems and to keep Maryland national leader in climate resiliency.

Thank You,

Jim Brown

Policy Director

Audubon Mid-Atlantic

Jim.brown@audubon.org

410-207-2445

MOS SB0092 Sustainable Bldg House Health and Govt

Uploaded by: Kurt Schwarz

Position: FAV



MARYLAND ORNITHOLOGICAL SOCIETY

February 2, 2023

Committee: Education, Energy, and Environment

Testimony on: SB0092: Department of General Services - Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023)

Position: Support: SB0092

The Maryland Ornithological Society (MOS) asks that the Senate Education, Energy, and Environment Committee give a favorable report of SB0092 and move it to the full Senate.

MOS is a Maryland-based volunteer organization of some 1800 members, with 15 chapters in Maryland. We are devoted to the study and preservation of birds and their habitat.

As you are aware, it is estimated that up to a billion birds a year die in collisions with glass on buildings and other structures.¹ While birds face many threats to their survival, the dramatic increase in the use of glass as a building material need not pose the unsustainable threat to birdlife that it currently does. We can use glass and still help our migrating and resident birds be able to navigate safely in and through our state.

Maryland sits in a vital position along one of the four major migration flyways, Maryland, the Atlantic Flyway, and billions of migrating birds pass through our state each migration season. Our State bird, the Baltimore Oriole, is one such migrant that returns yearly to breed and departs in Fall for wintering grounds in Central and South America. It is also a frequent victim of collisions with the glass that has become increasingly and more widely used in our state. Many otherwise successful fledgling young of the year will also perish in what would have been their first migration when they become confused by glass. Indeed, according to the Maryland Bird Conservation Partnership (MBCP), "Maryland (has) features that support an impressive diversity of ecosystems, habitats, and species...(and) due to a variety of threats, some 143 species of birds have been recognized as 'Species of Greatest Conservation Need'". The MBCP further notes that, "Over 200 species of birds breed in Maryland, more than half of which are considered to be Species of Greatest Conservation Need. Many species that breed in the state migrate to other areas outside of breeding season, (and) given the mobility of birds, planning at the landscape level and considering species needs during their full life cycle is

¹ Loss, Scott et al, Bird-building collisions in the United States: Estimates of annual mortality and species vulnerability, *The Condor*, Volume 116, Issue 1, February 2014, <https://academic.oup.com/condor/article/116/1/8/5153098>

important. (Further), working with a variety of partners will be critical to minimize mortality due to collisions.”

While many man-made factors challenge birds, perhaps none is as immediately fatal and artificial as a collision with glass. Birds have evolved to make decisions at flight speed and given the chance to avoid an object they can see, make quick decisions to do so. The air is their habitat, and the lightweight frames of birds enable them to fly that also makes them horrifyingly vulnerable to collision with glass. It is noteworthy that people cannot see glass and frequently walk into glass doors and other objects unless an added feature alerts them to its presence. We can also alert birds to the presence of glass and for many reasons, it is incumbent upon us to do so.

The diversity of bird species and their habitats is under increasing threat. Unless concerted efforts are taken in the near future Maryland will lose some of its greatest assets – healthy natural systems and the wide range of birds, plants, and other wildlife that they support. Maryland risks economic impact as well as a decrease in quality of life. An estimated 900,000 residents and non-residents enjoy birding in the state. While Marylanders generated \$483 million from wildlife-watching activities in 2011, the Total Industrial Output (TIO), which includes, direct, indirect, and induced effects, totaled over \$909 million, produced 10,807 full- and part-time jobs, and generated \$88.4 million in state and local tax revenue. Nationally, Americans who watch and feed birds contribute \$41 billion to the nation’s economy every year.²

Birds provide invaluable ecological services in areas of pest control, seed dispersal, and pollination. The immediate threats to their survival and a disruption to our symbiotic relationship with them are matters of great importance for a variety of reasons. It wasn’t that long ago that people were shooting birds out of the sky at a faster rate than they could reproduce. In our modern times the same affect will be achieved by continuing to erect glass buildings without incorporating reasonable measures to help the bird see the glass and avoid collisions with it. Both scenarios are directly responsible for removing birds at a faster rate than be sustained by reproduction.

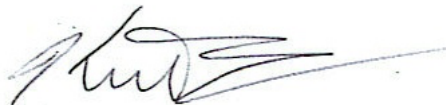
HB0006 is an important step in dealing with the issue of glass collisions. Bird-safe features are cost-neutral in the design phase of new buildings. They will also save energy, resulting in lower operating costs, and lower carbon emissions, which drive climate change. Two-thirds of North America’s birds face an increasing risk of

² US Fish and Wildlife Service, Economic Impact: Birds, Birdwatching and the U.S. Economy, November 16, 2017, <https://digitalmedia.fws.gov/digital/collection/document/id/1906>

extinction from global warming, 389 species are at risk.³ For these reasons, many jurisdictions across the nation have passed bird-safe legislation, most notably New York City. Here in Maryland, Howard County was the first jurisdiction to pass such legislation in July 2020. Washington, D.C. City Council recently passed a bird-friendly bill and Mayor Bowser signed it.

Sustainable growth in Maryland is very important. incorporating bird-safe features in buildings will allow this growth to continue without unsustainable bird mortality from collisions and carbon emissions., while being cost-neutral. We therefore ask you to issue a favorable report on the Maryland Sustainable Building Act of 2023 (SB0092)..

Sincerely,



Kurt R. Schwarz
Conservation Chair Emeritus
Maryland Ornithological Society
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³ Survival by Degrees, 389 Bird Species on the Brink, National Audubon Society, 2019, <https://nas-national-prod.s3.amazonaws.com/climatereport-2019-english-lowres.pdf>

sb92- DGS-energy standards, state inventory- EEE 2

Uploaded by: Lee Hudson

Position: FAV



Delaware-Maryland Synod
Evangelical Lutheran Church in America
God's work. Our hands.

Testimony Prepared for the
Education, Energy, and the Environment Committee
on
Senate Bill 92
February 2, 2023
Position: **Favorable**

Mr. Chairman and members of the Committee, thank you for the opportunity to support energy conservation in Maryland's building inventory. I am Lee Hudson, assistant to the bishop for public policy in the Delaware-Maryland Synod, Evangelical Lutheran Church in America. We are a faith community with three judicatories in every part of our State.

Senate Bill 92 will require the Maryland Department of General Services to apply established green building standards to State facilities, increasing the portfolio of present and future structures that reduce greenhouse gas emissions. More than merely aspirational, this goal will contribute to scaling the enterprise of GGR, a policy already in place by several acts of the General Assembly.

Additionally, it will make a good citizen of the State by supporting the intentions of its legislative record. We have supported Maryland policies and goals for GGR because of our commitment to caring for created goodness ("Caring for Creation," ELCA, 1993). We therefore also appreciate the bill's consideration of wildlife conservation in its goals. Updating the standards every five years will keep the policy intent current and relevant.

We ask a favorable report, then, for **Senate Bill 92**.

Lee Hudson

SB92_MDSierraClub_fav 2Feb2023.pdf

Uploaded by: Lily Fountain

Position: FAV



P.O. Box 278
Riverdale, MD 20738

Committee: Education, Energy, and the Environment

Testimony on: SB92 “Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023)”

Position: Support

Hearing Date: February 2, 2023

The Maryland Chapter of the Sierra Club urges support for SB92, which will require the Department of General Services to promulgate standards for state buildings to better protect Maryland’s bird population while saving energy. In 2020, Howard County became the first county in Maryland to pass legislation addressing this issue. Minnesota (2013) and Illinois (2021) have passed statewide legislation. The latter is most similar to SB92, which requires bird safe building design in new and renovated state owned buildings.¹ Many other localities have also passed legislation, including New York City, Madison, WI, Minneapolis, MN, Portland, OR, Washington, DC, as well as many cities in California and Canada.² The Washington, DC council has recently passed stronger legislation that is awaiting the Mayor’s signature.

Maryland has a rich diversity of birds with over 450 documented species, which is over half of the birds documented in the United States; 72 of these species are rare, threatened, or endangered.³ Maryland is located along the Atlantic flyway, through which billions of birds migrate seasonally.

One billion birds die each year by collision with glass in America, and research and practice show us that these deaths are preventable. The buildings we construct (or significantly renovate) can and should use bird-friendly design.

Importantly, with this bill, buildings become more energy efficient. While well-placed windows are critical to building design and allow for natural lighting, making windows increasingly larger is detrimental to overall energy efficiency. Windows are the weakest link in the building envelope⁴, therefore the greater the surface area of windows in a building, the more energy is needed to keep it cool in the summer and warm in the winter. In state-owned buildings, taxpayers are paying for extra heating and cooling costs. This extra energy use comes at a cost to the environment by contributing to climate change when it relies on fossil fuels.

In sum, incorporating bird-friendly design will save energy and protect birds. Maryland should take this first step by adopting SB92.

Carolyn Parsa
Chair, Natural Places Legislative Workgroup
Carolyn.Parsa@MDSierra.org

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org

¹ <https://gl.audubon.org/news/new-law-will-protect-illinois-birds-deadly-building-collisions>

² <https://abcbirds.org/glass-collisions/existing-ordinances/>

³ https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/mdbirds.aspx#:~:text=Over%20450%20bird%20species%20have,or%20a%20handful%20of%20times

⁴ <https://www.energy-manager.ca/windows-the-weakest-link/>

Founded in 1892, the Sierra Club is America’s oldest and largest grassroots environmental organization. The Maryland Chapter has over 75,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

SB Testimony 2023.pdf

Uploaded by: Lindsay Jacks

Position: FAV



Lindsay Jacks
11 Leeway
Baltimore, MD 21222

January 30, 2023

I am encouraging you to support SB92 Maryland Sustainable Buildings Act of 2023. I am asking you to support this bill because these same building standards have already been passed in many other states and cities. Passing this bill benefits the community, environment, and wildlife.

In my role as the Director of Lights Out Baltimore, I have seen the negative impact that poorly designed buildings have on the local community as well. Birds found dead or injured from building collisions in downtown Baltimore inspired members of the community to form Lights Out Baltimore (LOB), an all-volunteer based organization of the Baltimore Bird Club that rescues birds from glass collisions during spring and fall migration. Local businesses that too became disheartened by finding dead or injured birds have started monitoring their own buildings and installing retrofits that provide a safe environment for migratory birds. As LOB works with the community there is a need for state support on creating the surrounding environment next to bird habitats safe for birds.

Your support for this bill will do exactly that-incorporate truly sustainable design that considers light efficient practices and bird-safe elements to reduce glass collisions. Since 2008, LOB has found over 6500 dead birds in the downtown area, rescued 2200, and reported 107 species, 66 which are listed on the Department of Natural Resources Maryland Species of Greatest Conservation Need. One rescued bird was a Yellow Rail, a bird last, documented in 1893 in Baltimore city. An average of 450 birds are found dead in downtown Baltimore monitoring 20 buildings only 4 months a year. Can you imagine how high the average number is across the state of Maryland year around? With an increase of glass features in development, abundance of exposed lighting fixtures, the annual number of bird mortality will see a significant and alarming increase.

Voting in favor of this bill is an example of Maryland's leadership in building the community, conserving energy, saving energy costs, and conserving native wildlife. I urge you to support this important bill to ensure a vital future for these migratory birds and the Maryland community to enjoy them.

Thank you,
Lindsay Jacks

Dr Mark Southerland Testimony in Support of SB92 M

Uploaded by: Mark Southerland

Position: FAV



Maryland General Assembly – Senate EEE Committee – February 2, 2023

Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023) – SB 92

TESTIMONY OF DR. MARK SOUTHERLAND – **SUPPORT**

I am a professional ecologist who has served on the boards of Maryland Science Council, Maryland Water Monitoring Council, Howard County Environmental Sustainability Board, Howard County Conservancy, and Patapsco Heritage Greenway. I represent **Safe Skies Maryland**, a statewide organization dedicated to saving birds, wildlife, and people.

Two events brought me to advocating for this bill:

1. Glass Buildings as Energy Sinks. As a scientist working in the fields of energy conservation and green buildings, I was struck by the exponential growth of buildings with extensive glass facades. I realized that these majority glass buildings would be an energy sink and erode the energy conservation gains from decades of green building policies. While the extensive use of glass was originally considered green, because it reduced the need for artificial lighting, technological advances in LED lighting meant that the heat gain from windows and the need for additional air conditioning far outweighed the benefits. If future building continues to be dominated by extensive glass facades, then we are setting up society for increasing energy costs and greenhouse gas emissions for decades to come.

2. Glass Buildings as Killers of Birds. As a consultant to Maryland DNR on the licensing of windpower turbines, I learned that, while we could avoid major bird mortality at windpower turbines (with proper lighting and siting), building glass was a thousand times much larger killer of birds. Then I witnessed the construction of the first of several new, large glass buildings being built in Downtown Columbia and realized that we were creating a deathtrap for birds migrating through our community. I realized that, as the number of glass buildings statewide and nationwide was growing rapidly, bird deaths from building collisions was about to become much worse. Then, in September 2019, scientists reported that we have lost 29% of all birds in North America since 1970, confirming the dire state of this treasured resource.

Win-Win Solution. Most importantly, I learned that both problems were easily solvable. The building standards embodied in this bill would both conserve energy and reduce bird mortality by more than 90%. So, I was compelled to act and, working with Delegate Hill, Senators Guzzone and Lam, and others, began efforts to solve this problem at the local and state level.

Here is a summary of the problem and the solution:

This is an important problem with existing solutions and a diverse concerned citizenry

1. The number of majority glass buildings is increasing exponentially, setting up society for long-term energy costs as building envelopes will be in place or at least 50 years.
- There are no daylighting or energy benefits with window-to-wall ratios over 60 percent, and in most cases an area of 25-40 percent is optimum, i.e., lowest energy consumption
 - When glass treated to be bird friendly is used, energy loss is much reduced

2. 1 billion birds die in the U.S. every year colliding with transparent or reflective building glass (and the number of glass-dominated buildings is growing exponentially)
 - People walk into glass when they don't see the frame; birds never recognize a frame
 - Nearly all species are affected; even the best and brightest birds collide and die
 - Declining populations of migratory songbirds are significantly attributable to this non-sustainable loss
 - Birds are both an ecological mainstay and an economic driver through factors such as pest control and tourism (Maryland receives nearly \$1 billion in economic benefit from bird watching each year)

3. Building design and treated glass are an existing solution
 - Flight tunnel tests conducted by academics and the American Bird Conservancy have demonstrated the degree of safety provided by different kinds of glass
 - Green Business Council LEED program has codified the bird-friendly innovation credit standard in this bill
 - Building façade, screens, and shades work
 - Glass with UV or visible patterns of narrow lines or dots in 2"x4" arrangement work
 - Bird-friendly design is cost neutral at the design phase
 - Bird-friendly designs and glass are energy efficient and saves dollars over time

4. Bird Safe Building designs and retrofits are being implemented
 - Many beautiful glass buildings are bird friendly such as Anchorage Museum and the Inuit Headquarters in Mountainview CA
 - Jacob Javits Conference Center in NYC was expanded, but used bird friendly glass and has reduced bird deaths by 90% and energy consumption by 25%
 - Locally the Maryland DNR Tawes Building, National Aquarium, universities, nature centers and others are retrofitting their glass to be bird friendly

5. Bird Safe Building laws are being implemented
 - States of Illinois (2021) and Minnesota (2013) have mandatory bird safe building laws and Howard County MD passed a comprehensive law in July 2020
 - Mandatory laws are also in place in New York City, San Francisco, Oakland, Toronto, Ontario Province, and many other cities in US and Canada, with voluntary laws in other places (DC Council unanimously passed a bill and Mayor signed it on January 26, 2023)
 - Federal General Services Administration has instituted bird-safe standards, following passage in US House of a bi-partisan bill Bird-Safe Buildings Act earlier

Maryland has a chance to act locally to save money, fight climate change, and reduce the unsustainable deaths of economically important birds. Waiting even one year will see more glass buildings built and more money lost, more greenhouse gas emissions, and more birds dying.

SB92- National Aquarium - MD Sustainable Buildings

Uploaded by: Ryan Fredriksson

Position: FAV

Date: February 2, 2023

Bill: SB 92 – Department of General Services – Energy- Conserving Standards (Maryland Sustainable Buildings Act of 2023)

Position: Support

Dear Chair Feldman and Members of the Committee:

The National Aquarium respectfully requests a favorable report for **Senate Bill 92, Maryland Sustainable Buildings Act of 2023**, which will help reduce bird fatalities across Maryland and improve energy efficiency in public buildings throughout the state.

Experts estimate that glass collisions are a leading cause of bird mortality second only to habitat loss worldwide¹, and annually result in the deaths of at least 600 million birds in the U.S.² Maryland is part of the Atlantic Flyway, one of four major north-south migratory routes birds travel over North America and the one through which land is the most densely populated. Fortunately, solutions exist to dramatically limit fatal bird strikes and protect bird populations through building design, installation of bird-safe glass and films, and limits to interior lighting at night.

In recent years, the National Aquarium has worked with our animal care experts to cover over 3,000 sq. ft of existing glass with bird-safe dot patterns. These patterns create new, highly visible signage and have significantly reduced bird strikes on our building.

Thanks to support of the state, the National Aquarium recently replaced the iconic glass pyramid above the *Upland Tropical Rain Forest*. Each of the new 684 glass pyramid panels is made of entirely bird safe glass. The bird safe glass has an added benefit of increasing energy efficiency because the etched pattern, which makes it visible to birds, also diffuses sunlight and reduces hotspots within the exhibit. Incorporating bird safe glass into the design and build process is far more cost-effective than retrofitting existing glass, with the added benefit of increased energy efficiency overall.

SB 92 would help mitigate bird collisions across the state by requiring similar strategies be utilized on state buildings or that bird-safe building and design standards be considered from the start of new projects. Our experience shows that many of the methods used to prevent bird collisions not only reduce bird fatalities but also make economic sense and increase sustainability within the built environment. **We urge the Committee to issue a favorable report.**

Contact:

Ryan Fredriksson

Vice President, Government Affairs

410-385-8276

rfredriksson@aquarium.org



¹ Klem, D. 2008. Avian mortality at windows: the second largest human source of bird mortality on Earth. In: [Proceedings of the Fourth International Partners in Flight Conference, Tundra to Tropics](#), pp 244-251.

² Loss, S.R. et al. 2014. Bird-building collisions in the United States: Estimates of annual mortality and species vulnerability. *The Condor* 116:1. <https://doi.org/10.1650/CONDOR-13-090.1>

SB 0092 AIAMD Ltr of Support.pdf

Uploaded by: Sandi Worthman

Position: FAV

31 January, 2023

The Honorable Brian Feldman
Chair, Education Energy, and the Environment Committee
2 West
Miller Senate Office Building
Annapolis, Maryland 21401

Re: Letter of Support for SB 0092
Department of General Services – Energy – Conserving Standards
(Maryland Sustainable Buildings Act of 2023).

Dear Chairman Feldman and members of the Education Energy and the Environment Committee:

I am writing to voice AIA Maryland's support of Senate Bill 0092. AIA Maryland represents nearly 2,000 architects in the state of Maryland and advocates for the profession and the quality of the built environment. As we work to be good stewards of the built environment, we are equally cognizant of the natural environment that we interact with and we aim to minimize our impact on the natural world. This bill's primary purpose is clearly to reduce the estimated 1 billion bird deaths each year in the United States as a result of striking buildings. We believe this bill takes practical measures that can help reduce the likelihood of these collisions from happening and in turn, it may help reduce building energy use. The energy conserving standards are an aspect of the bird-safe design, largely tied to automatic lighting controls that turn off portions of interior and exterior lighting that may attract or confuse birds when buildings or site areas are not actively occupied. Additionally, energy conservation may be gained in the design process of assessing the building windows, screening and configuration. Bird-friendly design is particularly important in Maryland where we are on the Atlantic flyway, a heavily traveled path for migratory birds.

Member firms from our state chapter have tested the tool this bill implements, LEED Sustainable Sites pilot credit 55 on a couple of new 2-story sample projects. Research has shown that the first 40' of building height above the ground has the highest probability of bird strikes, so our sampling is relevant, and the pilot credit calculations account for building height zones carrying different risk factors. The process required for both projects required a modest amount of design time to comply with the pilot credit. The process enables sufficient flexibility to be able to meet the design criteria without any undue hardship and we do not expect it would have significant project cost impact. We also acknowledge and believe that there may be energy reduction through window criteria, screening and opacity of materials that may reduce heat gain on buildings in addition to limiting night-time illumination of interior glass-enclosed spaces and exterior lighting. Based on the testing of projects that were completed, we believe such accommodations can be made on new designs, or when existing buildings are being substantially renovated. In either case, the building skins and systems can be designed to respond to the proposed criteria.

Maryland is not acting alone in adopting guidelines like these. Given our geophysical presence along the coast and the Chesapeake Bay, it is particularly important to provide an accommodating migratory path for birds. Other states and jurisdictions have already enacted regulations similar to this bill, those include the state of Minnesota, New York City, San Francisco, Oakland, Chicago, Toronto and others. Howard County passed a law through county council, requiring mandatory bird safe design as a part of the County Green Building standards. Building codes continue to move toward developing buildings with a more efficient building envelope and the bird friendly criteria can be incorporated into the design parameters. Studies have shown that by implementing bird friendly design parameters, bird collision deaths can be reduced by up to 90 percent.

We recommend that the regulations be incorporated in the Maryland Green Building Council's program requirements documents so they are in a location where design professionals will reference criteria they need to meet. Starting with these measures early in the design process enables the design team to incorporate elements in the building design from the beginning where they may have limited to no effect on building cost.

AIA Maryland cares deeply about the quality of Maryland's natural and built environment. Sensible measures that diminish the impact of our built environment on the natural world are valuable to all of us. We therefore respectfully ask your committee to vote in favor of SB 0092 that provides thoughtful, responsible paths to bird-friendly design and may provide some added benefits of diminishing energy use.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Parts', with a long horizontal line extending to the right.

Chris Parts, AIA
Director, Past President, AIA Maryland

'23 SB 92 DGS Energy-Conserving Standards LOI EEE

Uploaded by: Ellen Robertson

Position: INFO

Wes Moore
Governor

Aruna Miller
Lt Governor



Atif Chaudhry
Secretary

Nelson E. Reichart
Deputy Secretary

BILL: **Senate Bill 92**
Department of General Services – Energy-Conserving Standards
(Maryland Sustainable Buildings Act of 2022)

COMMITTEE: Senate Education, Energy & Environment

DATE: February 2, 2023

POSITION: Letter of Information

Upon review of Senate Bill 92 – Department of General Services – Energy-Conserving Standards, the Department of General Services (DGS) provides these comments for informational purposes.

The bill would require DGS to establish guidelines and adopt regulations to minimize adverse impacts to birds on State buildings constructed, substantially altered, or acquired by DGS, to the extent practicable.

Senate Bill 92 requires lighting to be reduced in existing buildings to the extent practicable. A few State buildings would have to implement this, by using automatic control technologies. The requirement to reduce lighting on existing buildings may cause a significant cost, however this is left to DGS to determine the appropriateness and could be included when lighting projects are considered at existing facilities.

For additional information, contact Ellen Robertson at 410-260-2908.

SB 92 - State Projects - Bird Safe Buildings - NAI

Uploaded by: Tom Ballentine

Position: INFO



February 1, 2023

The Honorable Brian J. Feldman, Chair
Education, Energy, and the Environment Committee
Miller Senate Office Building, 2 West
Annapolis, MD 21401

Informational – SB 92 – Department of General Services – Energy – Conserving Standards

Dear, Chair Feldman Committee Members:

The NAIOP Maryland Chapters represent more than 700 companies involved in all aspects of commercial, industrial, and mixed-use real estate. NAIOP generally does not provide testimony on bills that affect construction standards for state buildings. But our membership has concerns about the confusing scope and several questionable provisions in SB 92 and would like the committee to consider the following points:

- The definition of state building and the required inclusion of the SB 92 standards in the Maryland High Performance Green Building Program cause confusion about whether the requirements will apply to private buildings leased to the state and whether private buildings that adhere to the Maryland Green Building Council's design guidelines will be required to meet the standards referenced in SB 92.
- The bill requires DGS use design features "consistent" with U.S Green Building Council LEED 55 Pilot Credit. LEED Pilots are experimental provisions that are being evaluated to determine if they should be awarded credits in future versions of the certification system. LEED 55 has been in pilot status for years and despite numerous opportunities has not been elevated to a full LEED credit. Many LEED certified professionals consider it to be contrary to other LEED priorities and outdated because it does not include audible deterrents and other more recent, effective, and less costly approaches to avoiding bird strikes.
- The LEED 55 Pilot runs contrary to LEED priorities because it calls for limiting the amount of glass on building facades and increasing the wall area. This approach reduces the amount of natural daylight that can reach work areas inside the building. Daylighting is important for the comfort of occupants and a priority element of LEED design.
- Replacing transparent glass with frosted or etched glass can add substantially to the cost of a building. Alternative glass treatments such as adhesive film must be replaced every 5-7 years increasing maintenance requirements. Both approaches have negative implications for ground floor retail uses and are generally viewed as creating less desirable work environments.
- Despite what has been implied, the use of glass on the exterior of buildings does not necessarily threaten energy conservation efforts. Double-paned windows available in this market are more efficient than the latest energy code requirements for Maryland's climate zone. Because building components are interrelated, design teams improve the efficiency of other parts of the building in order to achieve overall energy performance requirements while still using exterior glass. The recently adopted 2021 International Energy Conservation Code requires lighting of outdoor parking areas to automatically dim to 50% of its wattage when activity is not detected. This applies during all dark hours of the year, not the six months listed in the bill.

NAIOP respectfully requests your consideration of our point of view on SB 92.

Sincerely,

A handwritten signature in blue ink, appearing to read "T.M. Ballentine".

Tom Ballentine, Vice President for Policy
NAIOP Maryland Chapters - *The Association for Commercial Real Estate*

cc: Education, Energy and Environment Committee Members
Nick Manis – Manis, Canning Assoc.