



**TRAVIS**  
**AUDUBON**  
*Listen. Look. And Learn.*

# MAKE AUSTIN'S BUILDINGS BIRD-FRIENDLY

THE PROBLEM WITH GLASS AND HOW TO SOLVE IT



**TRAVIS  
AUDUBON**

*Listen. Look. And Learn.*

*Inspiring Conservation  
Through Birding*



Photo by Christy Esmahan

## Our Mission:

Promote the enjoyment, understanding, and conservation  
of native birds and their habitats through:

Land Conservation

Habitat Restoration and Management

Environmental Education

**Conservation Advocacy**

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September, 2019 report

lost 30% of our birds in the last 50 years.

Deaths caused by collisions with buildings  
a problem we can solve.



# THE PROBLEM: GLASS IS INVISIBLE

Every year dozens of people are hospitalized for walking into glass doors

In 2018 Apple was sued for unsafe conditions after at least 7 people were injured on 1 day in their new building



# THE PROBLEM: GLASS IS INVISIBLE

In 2015 Holland  
American cruise lines  
were fined \$2.4M  
because so many  
people had walked  
into glass sliding  
doors

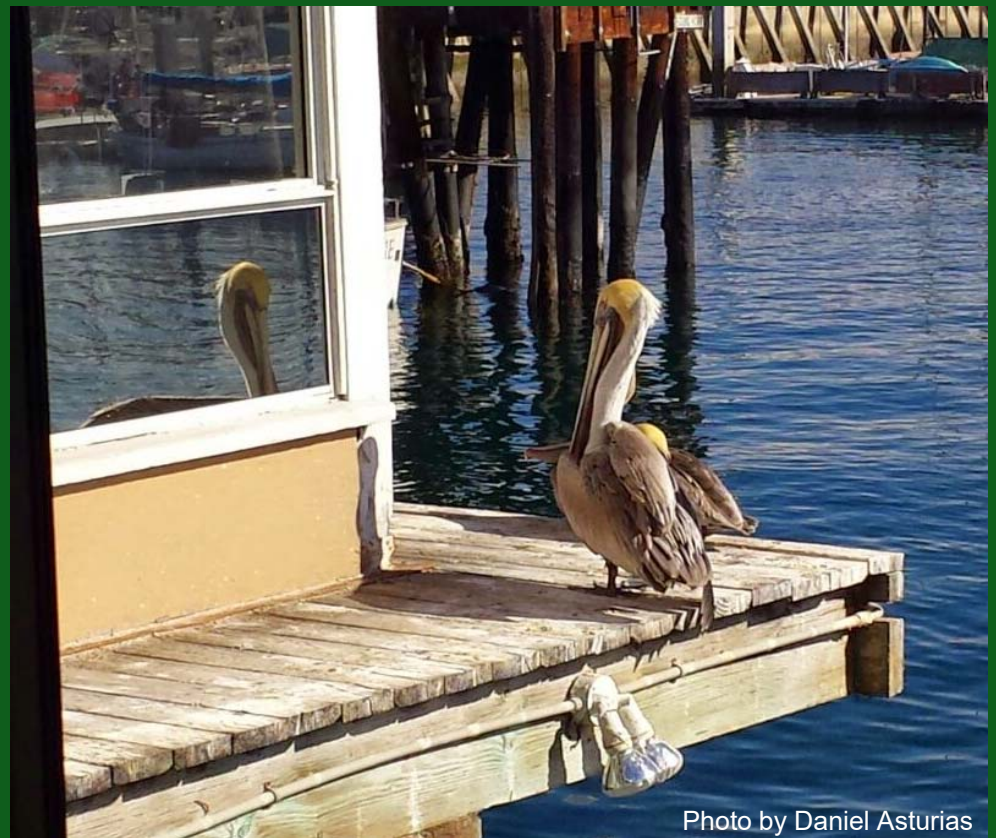


Photo by Daniel Asturias





The problem is so pervasive that some states, like California have a law that “employees shall be protected against the hazard of walking through glass by barriers or by conspicuous durable markings”

Cats, dogs,  
deer, bears  
and other  
mammals  
also run into  
glass, but  
birds are the  
most affected  
because they  
fly...fast and  
far.







At least 50% of bird strikes end in death.  
700,000,000 to 1,000,000,000 birds die yearly  
in North America from striking windows





Photo by Clif Ladd

Both highly  
reflective and  
and highly  
transparent glass  
are problematic.



Photo by Christine Sheppard





Glass walkways, balconies and glass corners are also lethal.



Photo by Stephen Fuqua,  
Austin, TX

Although  
individual high  
rise buildings  
can each kill  
many hundreds  
of birds per year,





Photo by Christy Esmahan (not Austin)

By far, the biggest problem are low-rise buildings and homes.



If birds don't die instantaneously from the impact, they will often die within 24-48 hours



Unlike natural predators, glass collisions kill indiscriminately. 20% of bird strike deaths are hummingbirds.



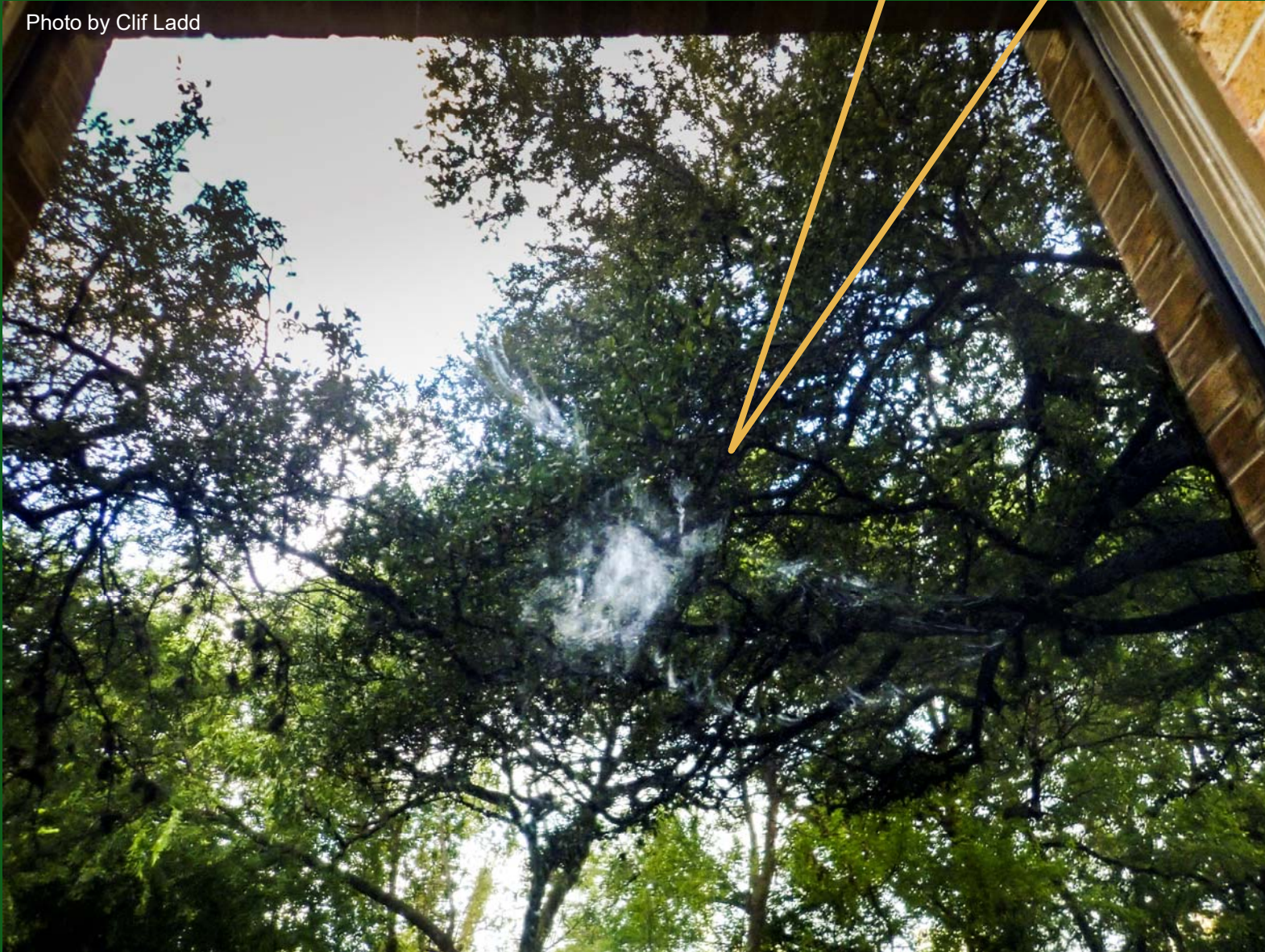


**2000 birds killed**



## Bird print from a collision

Photo by Clif Ladd



# WHY DO BIRDS MATTER?

Birds are important pollinators



They distribute seeds of many plants to keep our forests healthy

They eat millions of insects daily, which protects us and our crops



They are beautiful and birdwatching and feeding is a multi-billion dollar industry.

Photos by Christy Esmahan



# HOW CAN WE REDUCE BIRD STRIKES IN AUSTIN?

Over millions of years, songbirds evolved to migrate at night.



They use stars to guide them on their journeys of thousands of miles made often in just a few days or weeks



Excessive night light disorients birds and brings them down into urban areas



This then puts them in greater peril the next morning when they begin to hunt for food



This is  
especially an  
issue in Austin  
as we are in  
the Central  
Flyway

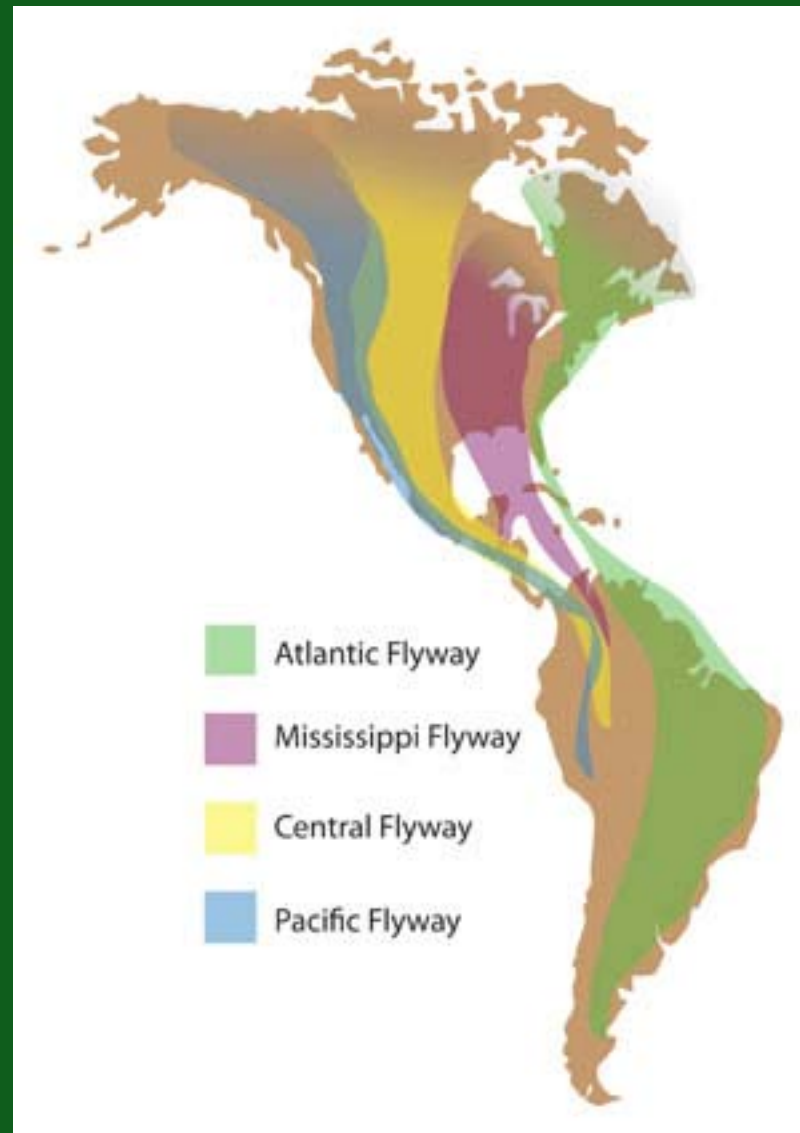




Photo by Christy Esmahan

Light pollution is also disruptive to many other animals including Austin's bats!



Photo by Fernando Tomas

Humans are also negatively impacted from  
light pollution





Photo by Christy Esmahan

The worst are lights that point upwards and  
lights that shine in all directions

# THE SOLUTION (PART 1) DARK SKIES



Addressing the problem of light pollution will have positive impacts on birds, other animals, humans AND reduce Austin's energy footprint.

## WHAT WE CAN DO

Individuals:  
close  
curtains/  
shades  
after dark &  
use timers  
and motion  
detectors  
for outdoor  
lighting.



Office  
buildings:  
timers to  
turn off  
lights after  
10pm &  
motion  
detectors in  
parking  
lots.



## THE SOLUTION (PART 2): GLASS

Buildings should use glass with a reflectance value of  $<15\%$

This makes glass less reflective, however **transparency** is still a problem



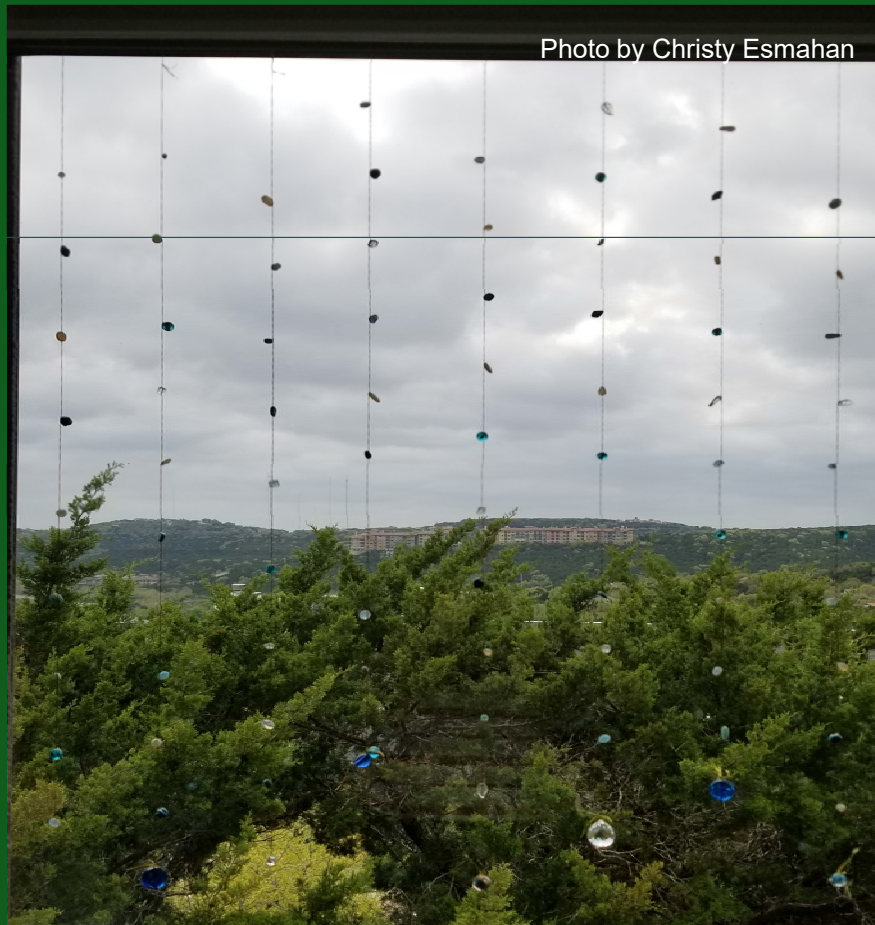
To combat transparency use patterns on glass, made by etching, film or components inside glass to make glass visible to birds



This is the new Intuit Headquarters in Silicon Valley (Mountainview) where bird-friendly building codes are enforced.



Patterns covering as little as 5% reduce birds strikes by over 90%

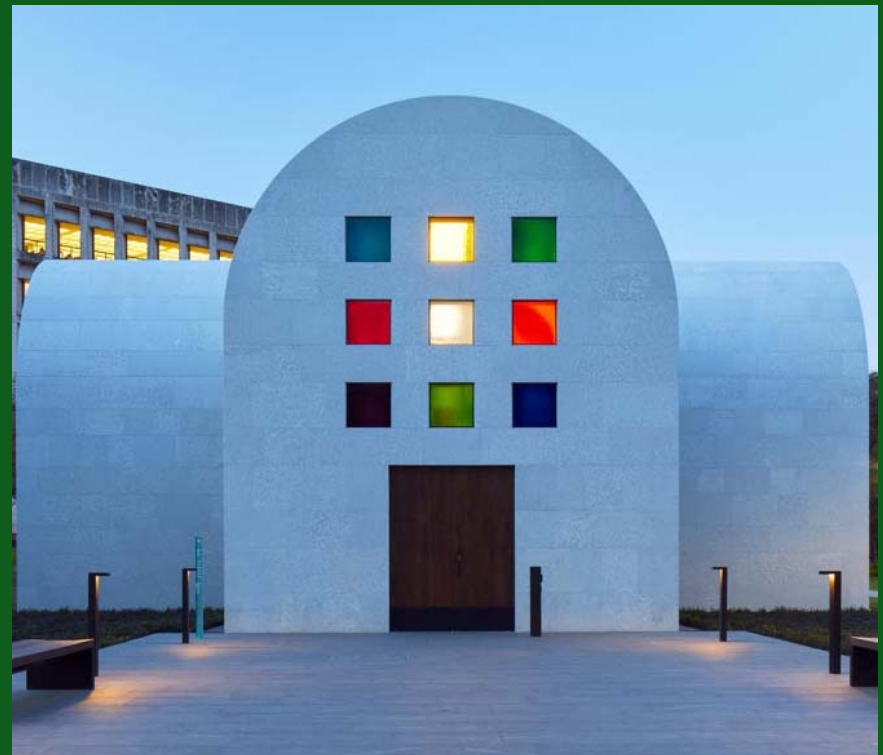


Patterns should be spaced no farther apart than 2 X 2"

Opaque, stained,  
UV and frosted  
glass are also  
effective



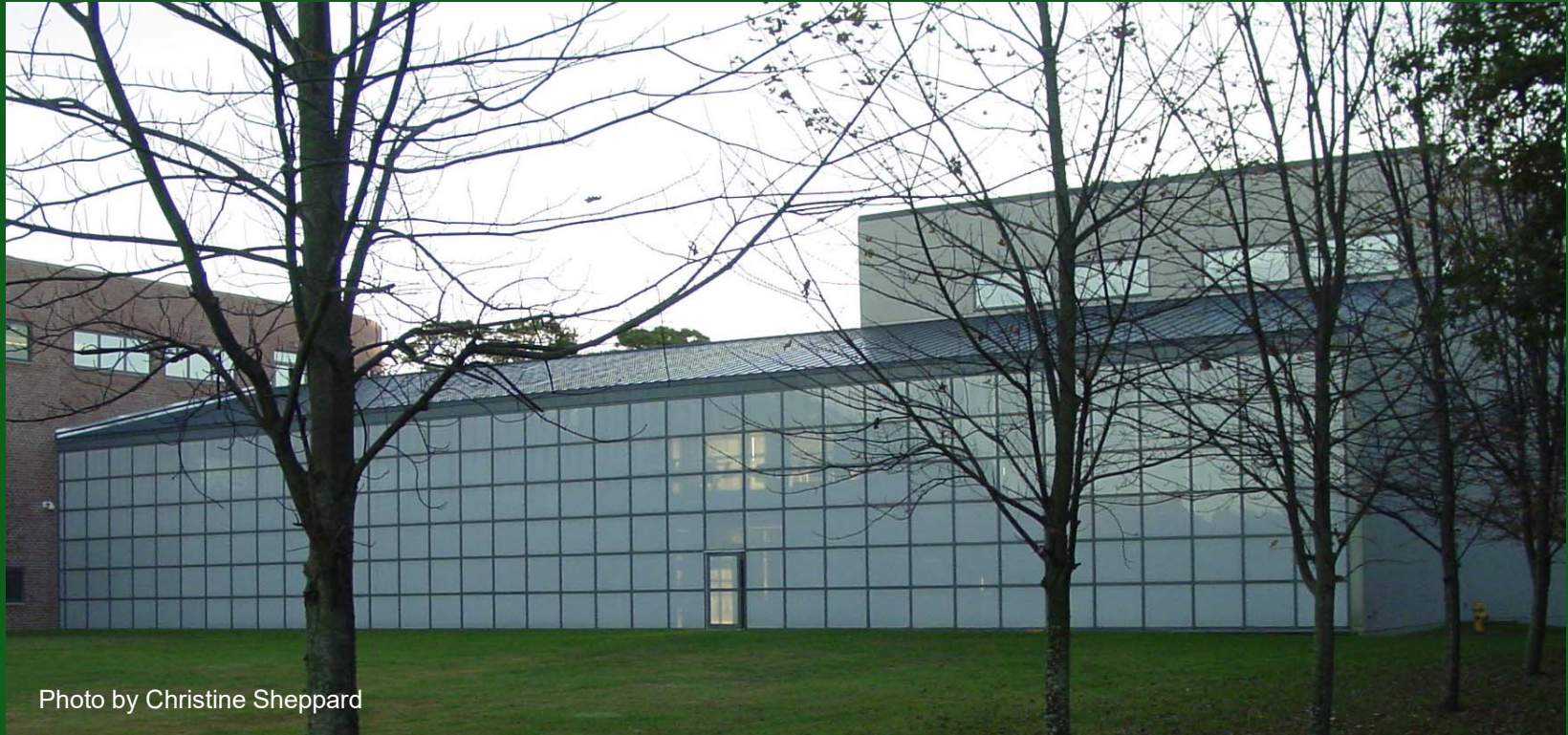
Photo and artwork by Sue Holt





Recessed glass, awnings, shades and other structures outside windows reduce the amount of glass that birds encounter when they are flying through the area.





Buildings can also be effectively retro-fitted to become more bird friendly. Applying a film made by 3M, Collidescape or Solyx can reduce bird strikes by over 90%.

It's time for Austin to join the growing group of cities across the US and Canada who have bird-friendly guidelines and laws!

Portland, Oregon has a Bird-Safe Window Administrative Rule for the Central City

Chicago has started the Lights Out Chicago program to make the city safer for migrating birds

New York City has been retrofitting buildings with film visible to birds for 10 years. Introducing legislation to require that 90% of glass on buildings be treated to reduce bird strike fatalities

**San Francisco Planning Commission approved new Bird-Safe Standards for San Francisco buildings**



So has Toronto

Houston

Baltimore

Minneapolis

Malibu

Sedona

Dripping Springs & Horseshoe Bay

Boston

Washington, DC

Detroit

# KEEP AUSTIN BIRD-FRIENDLY



- See the American Bird Conservancy website for more information  
[abcbirds.org](http://abcbirds.org)
- Follow the LEED standards for Bird Collision Deterrence (SSpc55)
- Encourage new buildings to have glass on less than 45% of their façade

Please report  
any dead birds  
on iNaturalist  
Austin Bird-  
Building Collision  
Project

Thank you!



Photo by Christy Esmahan