



McDonald Observatory

Education & Outreach Impact Report 2022

Exploring the Universe with learners of all ages.

Our education and outreach programs inspire curiosity about the Universe, contribute to the public understanding of astronomy, and excite and equip students and teachers to explore STEM concepts and careers.



Students explore features in a projection of the sun during a McDonald Observatory Astronomy Field Trip.

"Our 11-year-old was truly inspired to become an astronomer and hopes to work at the Observatory some day."

– 2022 McDonald Observatory Visitor Experience Survey response

52,000+

Visitors to McDonald Observatory in 2022.

8,012

Virtual visits from K-12 students online.

1,328

Hours of summer teacher professional development provided.

Projects	Details	Outcomes
StarDate Productions	Bi-monthly print magazine and daily 2-minute radio segment about astronomy	<ul style="list-style-type: none">• 100+ free magazine subscriptions provided to schools and libraries• 344 stations across the country play StarDate Radio every day
Livestream Programs	Live tours of the night sky or sun using telescopes and cameras – streamed on YouTube	<ul style="list-style-type: none">• 9 programs produced and archived online• 30,000+ views during the year
SkyTips Newsletter & Social Media	Monthly newsletter and social media strategy to inform readers about observatory news and astronomy events	<ul style="list-style-type: none">• Doubled SkyTips audience to almost 50,000• 100,000+ social media followers with high engagement

Astronomy training and inspiration

No other institution in Texas provides the public with this level of engagement with research and exploration.

A world-class research facility, McDonald Observatory has worked to expand human knowledge of the Universe since 1939.

McDonald Observatory is also a leader in public education and outreach. In a typical year, 75,000 visitors experience the site. Over a million people have visited over the years.

Daytime tours provide front row access to big science that wows, while evening star parties attract visitors searching for something many city dwellers now treasure with a deep sense of wonderment and awe: dark skies filled with endless stars.

Visitors also learn about the breakthrough discoveries through the exploration of exhibits in the 2,400 square foot gallery, viewing films in the indoor theater, and touring the large, scientific telescopes.

K-12 Education Programs

McDonald Observatory serves as an educational training ground for K-12 students and teachers through classroom materials, Astronomy Field Trips, and Teacher Professional Development Workshops.

When schools can't make the drive to us, our staff come to them via online Virtual Visits, which are provided at no cost to participants.



StarDate Productions

McDonald Observatory has produced StarDate Radio, the longest running science radio program in the United States, since 1978. The program reaches more than three million listeners per week on almost 350 public and commercial radio stations. Daily topics include astronomy history, sky-watching, science news and many others designed to engage and educate a general interest audience.

StarDate Magazine is also published six times a year and distributed for free to K-12 campuses across Texas.

Preserving Dark Skies *a new visitor center exhibit*

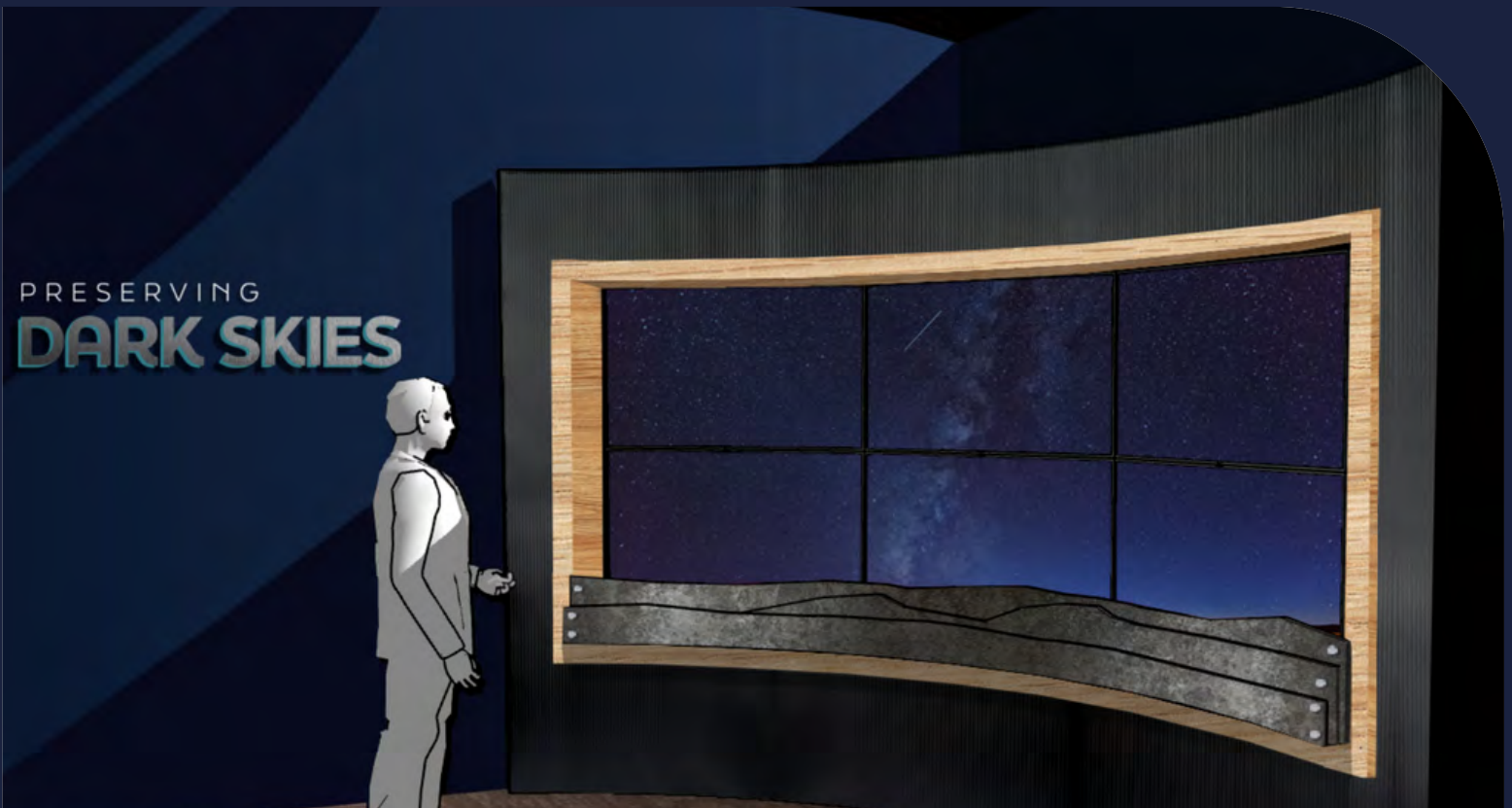
The Night Sky Belongs to Everyone

The first new exhibit at the Visitors Center in 20 years features a multimedia wall and interactive components to educate visitors on the negative impact of glare and light trespass. The exhibit also demonstrates how to keep skies dark by shielding lights, aiming them at the ground where light is needed, and other win-win solutions that don't compromise safety.

Dark skies are crucial for preserving the natural beauty of the night sky and for reducing the negative impacts of light pollution on scientific observations, human health, wildlife, and the environment.

The exhibit's success has been made possible through funding from Apache Corp., who have been strong allies and champions of night sky-friendly lighting in the Permian Basin.

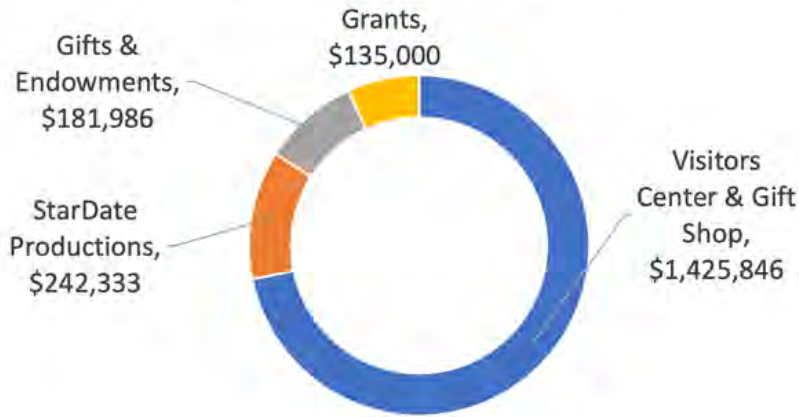
We can all do our part to preserve the natural beauty of the night sky.



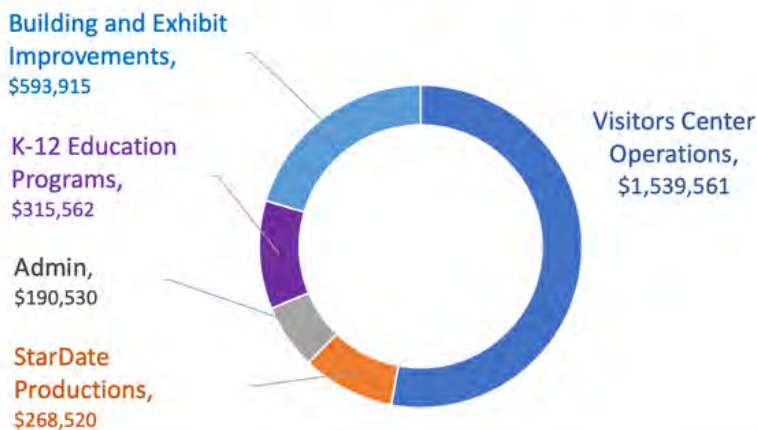
An artist rendition of the media wall that greets visitors with a custom film about Dark Skies.

McDonald Observatory Education & Outreach activities are self funded through earned income from program fees, gift shop sales, and StarDate subscriptions, plus contributions from individuals, foundations, and endowments.

2022 Education & Outreach Income



2023 Education & Outreach Budget



2023 Budget summary

Building & Exhibit Improvements includes ongoing projects like outdoor interpretive signs and updates like fresh paint and new carpet in the Gift Shop. We will invest over \$3 million in facility and exhibit updates through 2025.

K-12 Education Programs investment increases are related to statewide Eclipse training and outreach in 2023-2024.

Visitors Center Operations includes staffing, maintenance, and merchandise.



We'd like to thank all our donors for their generous support

Special thanks to those individuals and households who go above and beyond through sustained giving as members of the Friends of McDonald Observatory program, or through direct donations to the Visitors Center annual fund, or to StarDate productions. Additional thanks to the following organizations who help make our work possible.

Apache Corp.
The Abell-Hanger Foundation
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The Fash Foundation
The Alfred S. Gage Foundation
The Albert and Ethel Herzstein Charitable Foundation
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The National Science Foundation

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The Lynn Lyles Brill Education & Outreach Endowment
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The MESA Engineering Education Endowment in honor of David L. Lambert
The Bill and Alice Wright Endowment for Education & Outreach
The Mary Ann Rankin Endowment for UTeach Workshops
The Mary Kay Hemenway Outreach & Education Endowment

McDonald Observatory's education and outreach initiatives provide many entry points to astronomy for stargazers of all ages, including virtual and in-person astronomy field trips, K-12 summer teacher workshops, Live-from-McDonald broadcasts on YouTube, and StarDate magazine and radio programs. We are grateful to the Friends of McDonald Observatory members, individuals, and organizations for their support of education and outreach programming.

It means the Universe to us!

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