

### Today We Will Discuss

Solar Eclipse definitions, facts, and duration in Morgan County.

Key concerns and considerations in relation to the event on April 8, 2024

#### Brief Q&A with Morgan County EMA

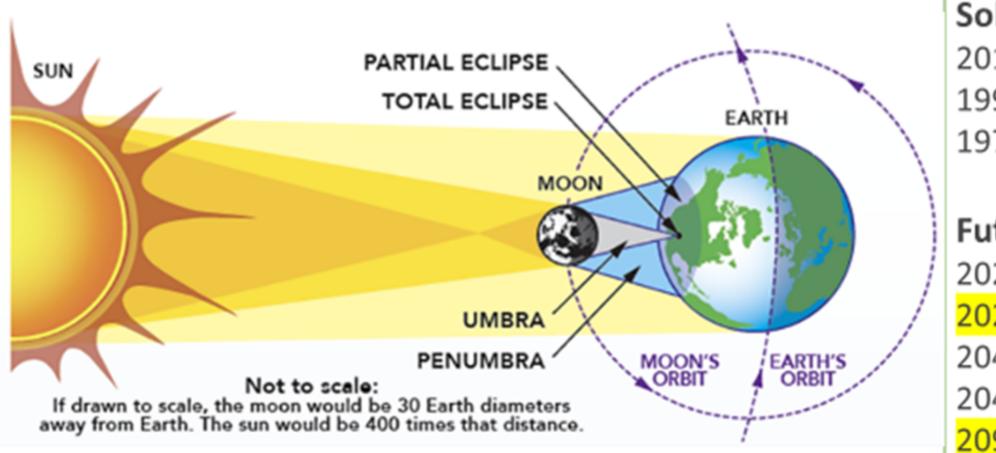
Solar Eclipse Fast Facts and Morgan County Totality **Experience Explained** 



# Solar Eclipse Facts

<u>What is an eclipse?</u> An eclipse occurs when the moon's orbit crosses in front of the sun, blocking all or part of the sun's rays reaching the earth's surface. There are different types.

- Total eclipse: Moon completely blocks the sun, allowing the corona (the sun's "atmosphere") to be visible. This is the eclipse we will be viewing!
- Annular eclipse: Moon is at apogee (furthest point from the earth) and the sun isn't completely hidden. The sun looks like a thin ring around the moon.
- Partial eclipse: Moon blocks only a portion of the sun.



#### Solar Eclipses in North America:

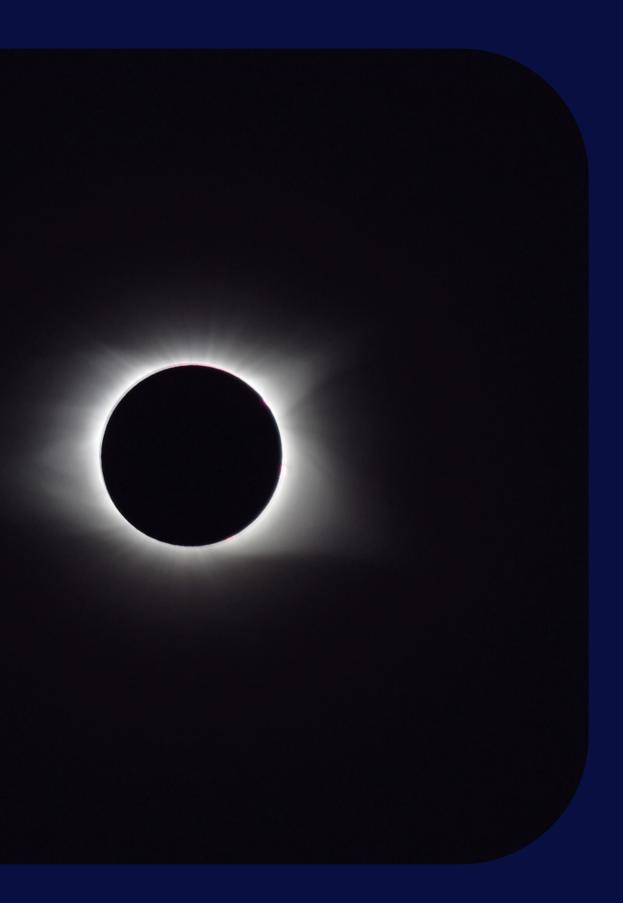
2017: Most recent total eclipse 1994: Most recent annular eclipse 1979: Total eclipse in U.S.

#### Future Solar Eclipses:

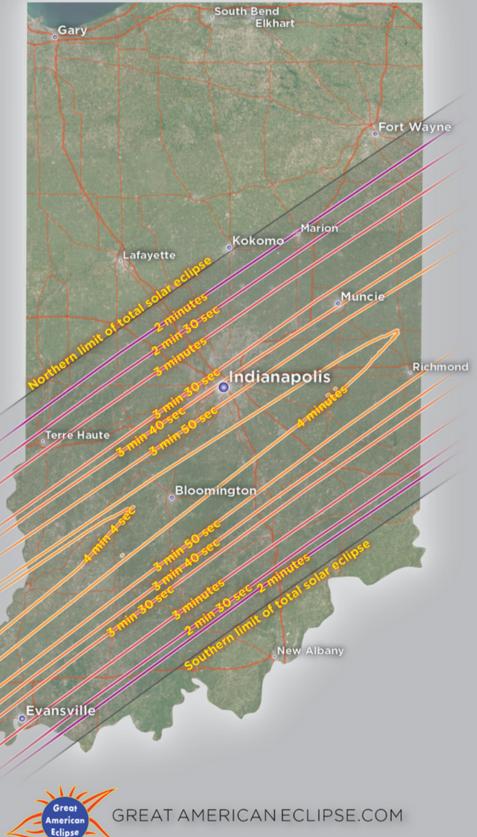
2023 (10/14): Annular eclipse 2024 (4/8): Total eclipse\*\*\* 2044 (8/23): Total eclipse 2045 (8/12): Total Eclipse 2099 (9/14): Total Eclipse\*\*\*

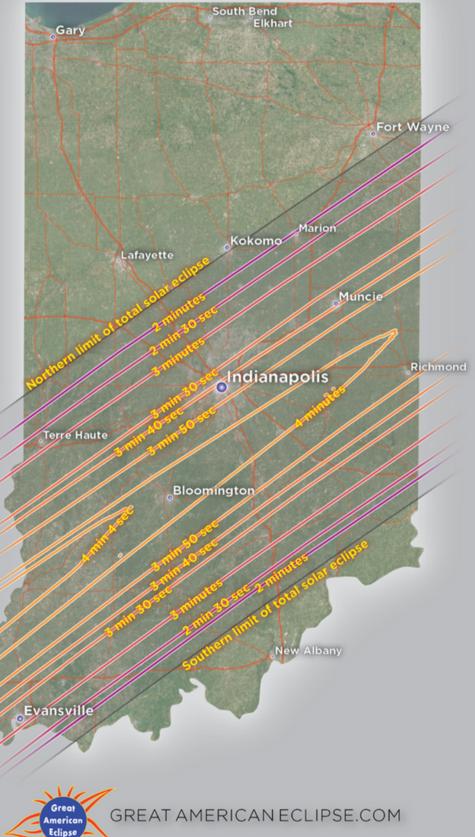
### 4 Minutes 1 Seconds

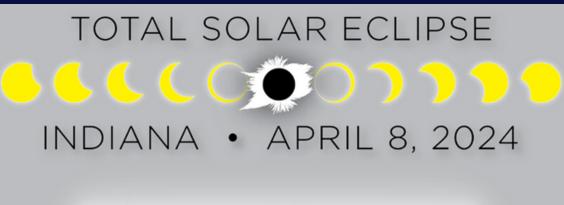
is the duration of totality in Morgan County. This duration is the 4th longest viewing time in Indiana on April 8. The totality will begin at 3:05 pm.



# Solar Ecipse Path Indiana







# Understanding the Impact

# Key Consideration

For some, this is a "once in a lifetime" or first-time opportunity. For others, they have seen partial eclipses, but now have a chance to see totality. There are some who HAVE seen totality and want to see it again. But this event offers something for everyone!

A turnout larger than for the 2017 Eclipse is expected. At the 2018 TRB Annual Meeting, a poll was conducted that determined that many repeat viewers will travel to see totality again, and many who missed the last eclipse will travel to see totality based on what they have heard from those who watched in 2017.

## Tourism

Neighboring counties have already nearly sold out of hotels for Eclipse weekend. State Parks have sold out of their hotel rooms throughout the Eclipse path.

> Both Martinsville and Mooresville are offering events such as concerts and a bi-centennial festival.

> > Air BnB's are beginning to fill within Morgan County

Visitors are expected to begin arriving 4/5/23, the Friday before the eclipse, but it is anticipated that ALL tourists will begin trying to leave as soon as the Eclipse ends.

## Traffic

The 2017 Total Solar Eclipse brought in approximately 5 million participants along the path of totality.

> 5 million people leaving that path of totality at once is comparable to 71 sellout football games ending at exactly the same time.

While Morgan County is not expecting 5 million here viewing, there will be thousands in our county and bordering communities. Comparable counties in 2017 saw over 120,000 visitors.

> With several major interstates and highways within Morgan County, severe traffic backups are expected. As the main roads fill, GPS will begin routing people to "backroads" leading to significant traffic jams.



# Traffic Continued

School Districts within Morgan County have announced April 8, 2024 as an E-Learning Day - One of the reasons for this decision is the anticipated traffic.

> The Solar Eclipse timing aligns closely with dismissal times. This would lead to children being stuck on school buses in traffic for hours.

#### **Travel Times in 2017**

- Casper, Wyoming to Denver Colorado 10+ hrs. • usually a 4-hr. drive
- EMA in North Carolina reports their county was "gridlocked" for over 6 hrs. after Eclipse ended.
- Louisville, Kentucky to Indianapolis, IN 6+ hrs.
- Hopkinsville KY to Louisville KY 6-8 hrs

# Preparing in Morgan County

### **Business and Management** Considerations

#### Shift Work

Staggering start/end times to accommodate traffic jams

#### End of Day

Consider closing at 1 or 2 pm instead of 3 or 4 pm so employees can safely get home.

Can a remote work day be implemented?

#### After Hrs. Event

Small crew stays at work to hand out/sell eclipse glasses and opens parking lot for viewing

Unknown impact for internet, cell service, and other forms of communication

# **Considerations** Continued

Block off parking lots or implement other security measures if you do NOT want people viewing on the property.

> Open grass areas should be considered as well. There will be people who do not know the Eclipse is happening or where to view, and they will stop anywhere.

> > Stock up on your products BEFORE 4/5/24. There will be a large influx of visitors and people passing through the county, plan accordingly.

## Considering a Solar Eclipse event?

April 8, 2024 — Total Solar Eclipse — City of Martinsville



The animation shows what the eclipse approximately looks like in City of Martinsville. Stages and times of the eclipse are outlined below. All times are local time (EDT) for City of Martinsville.

Time	Phase	Event	Direction	Altitude
<b>1:49:41 pm</b> Mon, Apr 8		Partial Eclipse begins The Moon touches the Sun's edge.	↓ 181°	<u>×</u> 58.2°
3:05:16 pm Mon, Apr 8	۲	Full Eclipse begins The Sun becomes totally eclipsed.	<b>1</b> 213°	53.7°
3:07:17 pm Mon, Apr 8	۲	Maximum Eclipse Moon is closest to the center of the Sun.	<b>1</b> 214°	<u>53.5</u> °
3:09:17 pm Mon, Apr 8	۲	Full Eclipse ends The total eclipse ends.	<b>∠</b> 215°	∑ 53.3°
4:22:45 pm Mon, Apr 8		Partial Eclipse ends The Moon leaves the Sun's edge.	<b>∠</b> 238°	42.9°

If you are considering an event at your location, you are encouraged to check the position of the sun at approximately 3:05 on Labor Day of 2023 to get a good idea of eclipse visiblity at your potential viewing location.

Visit www.timeanddate.com/eclipse for your planned location.

# April 8, 2024 — Total Solar Eclipse — Mooresville Mon, Apr 8, 2024 at 3:07 pm EDT

The animation shows what the eclipse approximately looks like in Mooresville. Stages and times of the eclipse are outlined below. All times are local time (EDT) for Mooresville.

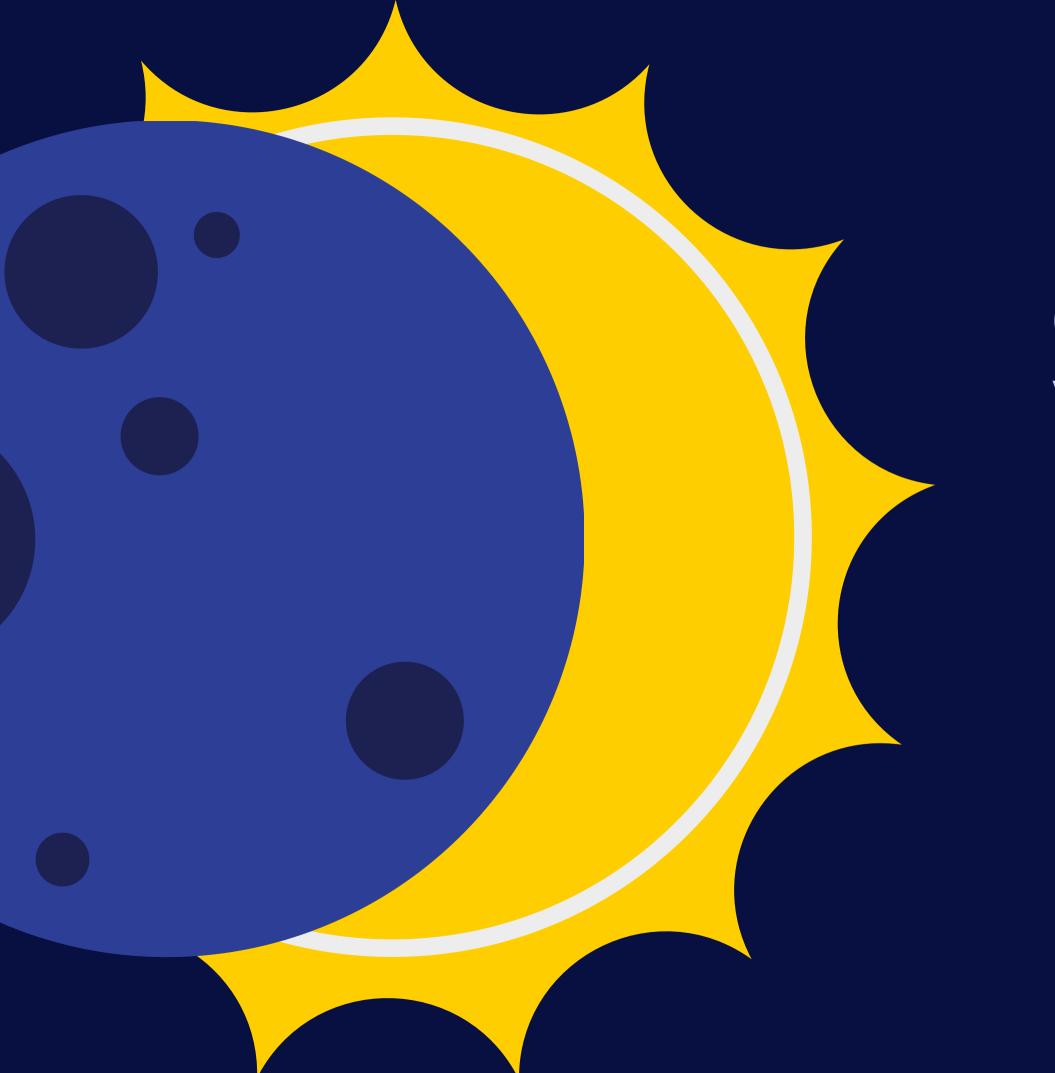
Time	Phase	Event	Direction	Altitude
1:50:01 pm		Partial Eclipse begins	↓	<u>X</u>
Mon, Apr 8		The Moon touches the Sun's edge.	181°	58.0°
3:05:34 pm	۲	Full Eclipse begins	<b>↓</b>	<u>∕</u>
Mon, Apr 8		The Sun becomes totally eclipsed.	213°	53.5°
3:07:31 pm	۲	Maximum Eclipse	<b>∠</b>	<u>×</u>
Mon, Apr 8		Moon is closest to the center of the Sun.	214°	53.3°
3:09:28 pm Mon, Apr 8	۲	Full Eclipse ends The total eclipse ends.	<b>↓</b> 215°	<u> </u>
4:22:53 pm Mon, Apr 8		Partial Eclipse ends The Moon leaves the Sun's edge.	<b>∠</b> 238°	42.7°

### Considering a Solar Eclipse event?

#### **Chambers & Visit** Morgan County

are great resources to learn about planned events or to promote your event

#### **Mooresville 200** Another resource for those interested in Mooresville **Bicentennial and** Eclipse events.



When purchasing or using glasses, ensure they are INSGC Certified to prevent eye damage.

### Be Aware of **Counterfeit Eclipse Viewing Glasses**

### Past Eclipse "Lessons Learned"

#### **Restaurants**

Grab and Go has been listed as the best option expect large volume of diners

#### <u>Going the extra</u> <u>mile</u>

Sunscreen and water bottles were greatly appreciated if you have a viewing site or a table set up at an event

#### **Theme**

Visitors and locals alike really enjoyed eclipse themed foods/drinks/desserts Printed directional signs for parking, opened businesses, etc. highly appreciated and beneficial

#### **Local Coordination**

Things went smoothly when plans were shared with public safety/EMA

#### <u>Signage</u>

Morgan County EMA Solar Eclipse Notification Group to join text morganineclipse2024 to 69310

