April 8, 2024 Total Solar Eclipse

T-89 Days

Colin Campbell, Planner

Planning, Training, & Exercise Branch
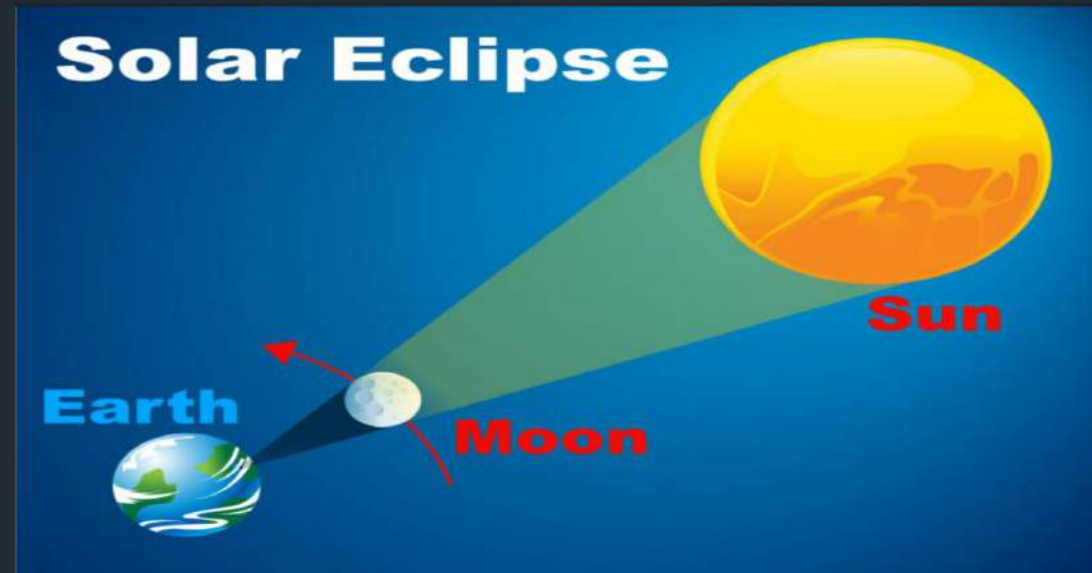
Jeff Klein, Erin Konecki, Suzette Hall

Wood County EMA

OHIO EMERGENCY MANAGEMENT AGENCY

Ohio | Department of Public Safety

EMAP Accredited

What is a Total Solar Eclipse?

- Last one in Ohio in 1806
- Only 15 visible in U.S. since 1867
- Last one in 2017 – visible in parts of Kentucky
- Last one in North America till 2044 in just ND; Next on in Ohio - 2444

TOTALITY DURATIONS
April 8, 2024

Burlington, VT
3 MIN 15 SEC

Toledo, OH
1 MIN 53 SEC

Cleveland, OH
3 MIN 49 SEC

Indianapolis, IN
3 MIN 49 SEC

Austin, TX
1 MIN 44 SEC

San Antonio, TX
2 MIN 3 SEC

Buffalo, NY
3 MIN 45 SEC

Erie, PA
3 MIN 40 SEC

Little Rock, AR
2 MIN 20 SEC

Dallas, TX
3 MIN 51 SEC

Centerline Duration Key:

- 4:03 - 4:27
- 3:40 - 4:03
- 3:17 - 3:40
- 2:54 - 3:17

(Durations shown are only representative samples)

Map adapted by NationalEclipse.com from original at eclipse.gsfc.nasa.gov. Map copyright Google, INEGI, ORION-ME. Eclipse predictions courtesy of Fred Espenak, NASA/Goddard Space Flight Center.

August 21, 2017, Solar Eclipse Pathway

Total Solar Eclipses: 2017 vs. 2024

	August 21, 2017	April 8, 2024
Population in path	12 million	32 million
Max Duration	2 min 40.2 secs	4 min 28.1 secs
Path width	71 miles	124 miles

The Eclipse's Pathway

- **Total Solar Eclipse – April 8th, 2024**
- Eclipse will travel across Ohio from southwest to northeast
- Totality will enter Ohio near Greenville, Ohio around 3:00 pm, and will exit near Avon Lake, Ohio around 3:10 pm
- Takes about ten minutes to travel across Ohio
- Up to 2-4 minutes of totality – depends on where you are
- Areas of Totality and Partial Eclipse

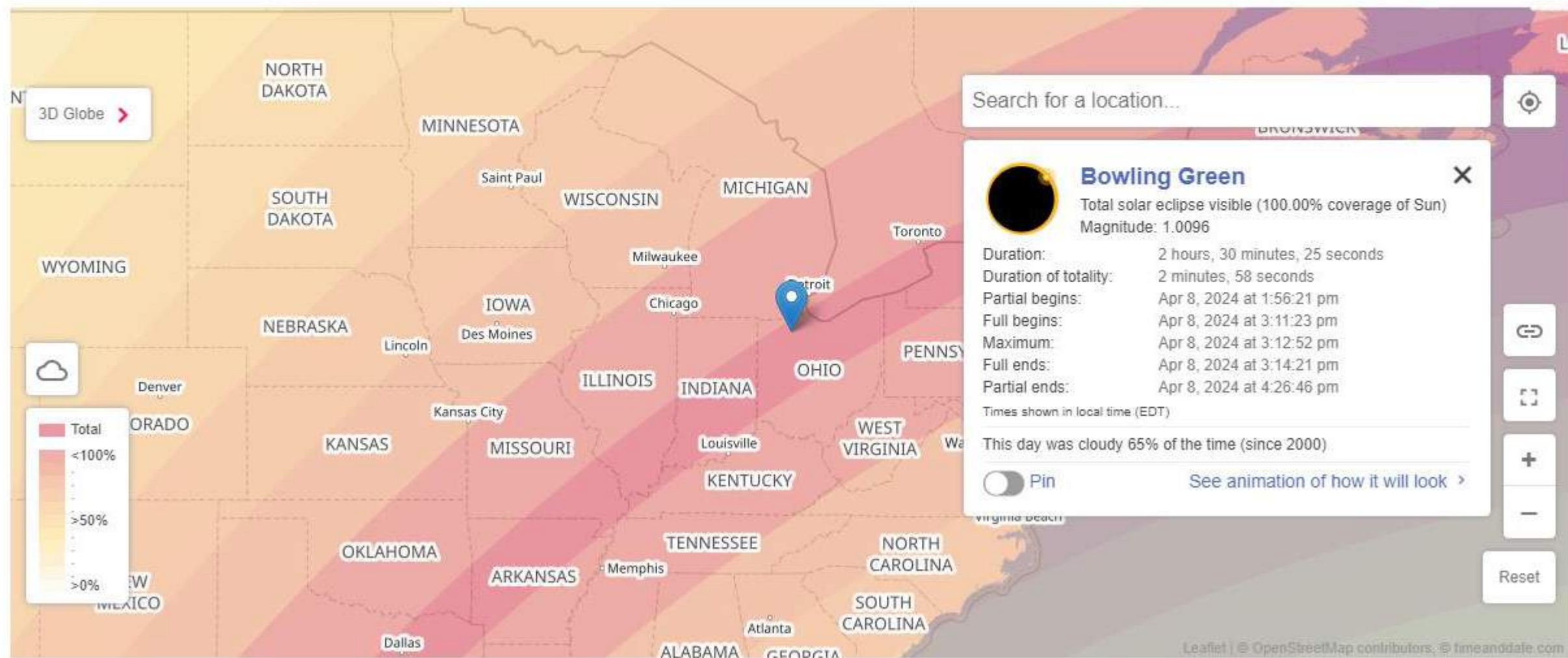# Eclipse Path of Total Solar Eclipse on April 8, 2024
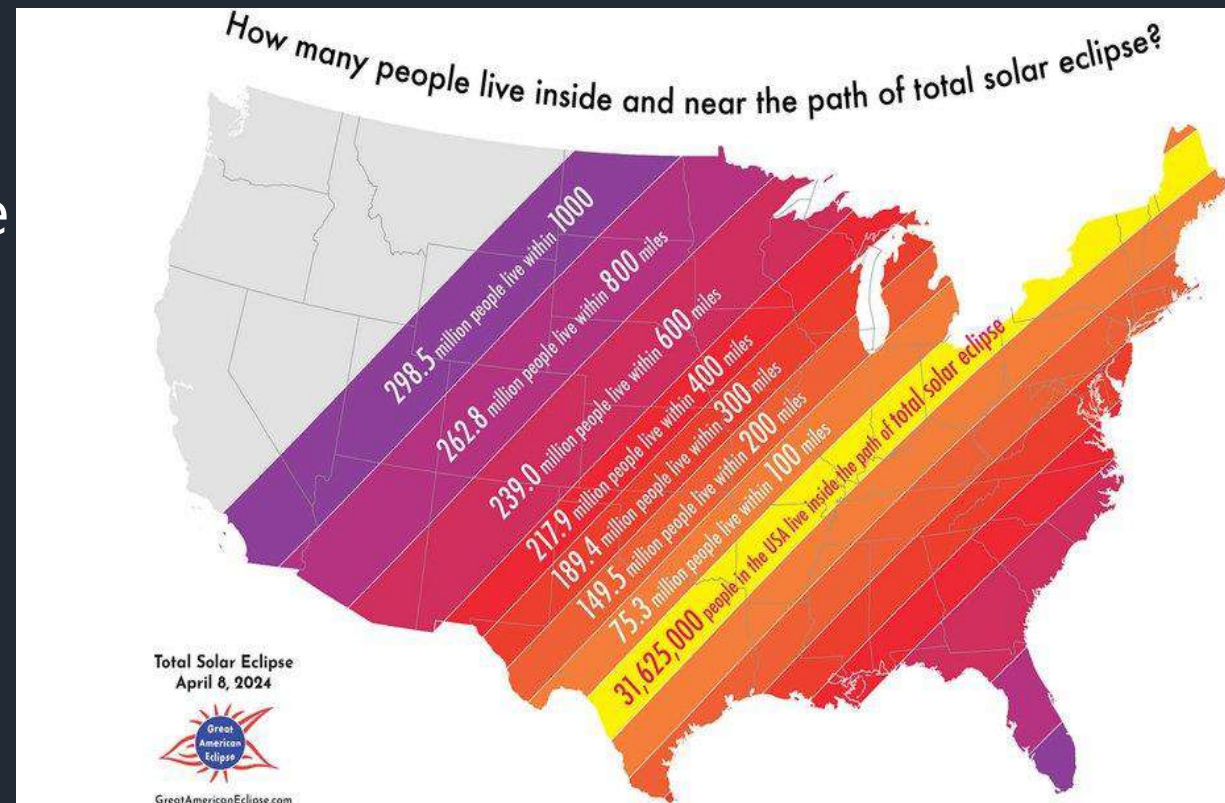
Eclipse Information   **Path Map**   3D Path Globe   Live Stream

Eclipse Map — April 8, 2024 Total Solar Eclipse

3D Globe ❯

NORTH DAKOTA

MINNESOTA

SOUTH DAKOTA

Saint Paul

WISCONSIN

MICHIGAN

WYOMING

Milwaukee

Toronto

IOWA

Chicago

Detroit

NEBRASKA

Des Moines

Lincoln

ILLINOIS   INDIANA

OHIO

PENNSY

Denver

ORADO

Kansas City

MISSOURI

Louisville

WEST VIRGINIA   Wa

Total

KANSAS

<100%

KENTUCKY

>50%

OKLAHOMA

TENNESSEE

NORTH CAROLINA

>0%

ARKANSAS

Memphis

Virginia Beach

W

MEXICO

Atlanta

SOUTH CAROLINA

Dallas

ALABAMA   GEORGIA

Search for a location...

Bowling Green   ✕

Total solar eclipse visible (100.00% coverage of Sun)
Magnitude: 1.0096

Duration:	2 hours, 30 minutes, 25 seconds
Duration of totality:	2 minutes, 58 seconds
Partial begins:	Apr 8, 2024 at 1:56:21 pm
Full begins:	Apr 8, 2024 at 3:11:23 pm
Maximum:	Apr 8, 2024 at 3:12:52 pm
Full ends:	Apr 8, 2024 at 3:14:21 pm
Partial ends:	Apr 8, 2024 at 4:26:46 pm

Times shown in local time (EDT)

This day was cloudy 65% of the time (since 2000)

⬤ Pin   See animation of how it will look ❯

Leaflet | © OpenStreetMap contributors, © timeanddate.com

Reset

What are the Impacts?

- Ohio is within a one-day drive of 70% of the U.S. population
- Local population in totality communities could double or triple
- Extreme demand for hotels, campsites, restaurants, entertainment facilities, parks, etc.
- Extreme traffic, stresses to local infrastructure
- Potential for local income generation
- Educational opportunities

What is the State Doing?

- Formed a State-level Eclipse Planning Task Force
- In early phase of planning for the event
- Preparing guidance documents and links to information
- State Eclipse Web Site

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Ohio Eclipse Planning Task Force

What do communities need to plan for?

- Local eclipse festivals and viewing parties – "Arrive Early, Stay Late, Stay Put"

- Population surge
- Traffic management – egress support
- Local infrastructure stresses
- Local emergency operational support – public works, law enforcement, supplies, sanitation, cellular communications
- Health, **safety** and welfare
- April weather could be an issue – cold, cloud cover

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What do Counties Need to Do?

- Work with local organizers
- Think through equipment, supplies, infrastructure needs
- Arrange for lodging and viewing options
- Form a local Eclipse Planning Task Force/ Committees
- Prepare for the worst, hope for the best
- "Total Eclipse in the 'Burg"

What should we expect locally.

- Wood County is on the northern edge of area of totality.
- I75 & I80 interchange "Golden Triangle"
- Potential viewing areas that can be seen from I75
- Over 200,000 BGSU Alumni
- Approximately 5,000 BGSU Students who live in college owned, operated or affiliated housing
- Estimated population doubling to 264,496

Time frame

- Easter is March 31, 2024
  - Many schools will be on spring break between Easter and the Solar Eclipse.
- Expect visitors to arrive starting Friday April 5 and leave Tuesday April 9.

Impacts- Travel

- Expect increased traffic
- Visitors may be confused in congested areas or non-traditional traffic patterns
  - Diverging Diamond
  - Center point interchange
  - Reduced Collision U-Turn (RCUT or Michigan U-Turn)

April 8, 2023 Traffic

- If you can, stay home and enjoy the eclipse!
- Anything moving on the roadways will be impacted:
  - Mail
  - Garbage pick-up
  - Transportation services: bus, cab, Uber
  - Home deliveries: UPS, Amazon, Uber eats
  - Meals on Wheels
  - To and from work and/or appointments
  - Expect parking lots off major roads to be full

Services and Supplies

- Fuel stations: long lines to gas shortages
- Grocery store and restaurant shortages
- Home repair delays both scheduled and emergencies
- Non-essential business are being asked to consider being closed. Call ahead to make sure they are open.
- Employees may not be able to get to work due to traffic congestion.

Communication

- Most cell carriers have an ability to handle a 10% to 25% increase in cell data usage.

- Expect issues using cell phones and data to be slow and have issues making calls

- Do not forget about other mobile data devices such as hotspots, wearable products, credit card readers, video on cellular networks, fire-medical-law enforcement alarm systems on cellular networks.

Communication Suggestions

- Use standard or wired VOIP phones if possible
- Set your cell phone to make calls Wi-Fi calls
  - Make sure you are logged in on the Wi-Fi with the correct password.
- If cellular does not work, try texting and email
- Use common platforms: WhatsApp, Facebook Messenger, iMessage (not recommending any app)
  - Make sure those you are trying to contact know what you will be using.

Communication Suggestions

- Having a family member outside the eclipse area to be a relay.
- Amateur Radio
- Family Radio/ GMRS
- CB
- Email (if you have multiple email address, which one you will be monitoring)

General Considerations

- Use infrastructure currently in place
  - Restrooms
  - Food/ cooking/storage
  - Recycling and trash bins
    - Identify when they will need attention and/or cleaning
  - WiFi
  - Medical
  - Security
  - Signage

General Considerations Cont.

- Have emergency plans
  - Weather
  - Civil unrest
  - Lost children
  - Access and functional needs population
  - Loss of utility
  - Homeless (no motel rooms)
  - Addressing general needs if your area becomes inaccessible

What are Your Concerns?

- Will your supplies/ fuel be impacted?
- How will you communicate with your family?
- How will the increase traffic impact you?
- Will services you need be impacted?
- Pop-up events?

What should your organization do?

- Prepare your employees.
- Where do your employees live? Will they travel to work be impacted?
- Assess your ability to maintain operations during the eclipse time frame.
- Ensure adequate supplies on site.
- Limit travel for employees, transporting goods/ services.
  - Hazardous materials stopped in traffic.
- Determine essential services and/or operations.
- Identify "trigger points"?

What should your organization do?

- Site security to include: property, access, parking, restricted areas, enough space to maintain operations such as semi maneuverability.

- Staffing to accomplish security and ability to maintain your plan.

- Attempt to identify what your neighbors are doing that may impact your facility and/or operations.

What should your organization do?

- Develop a communications plans.
  - Internal
  - Employees off site
  - Customers and partners
- Review Continuity of Operations Plans (COOP)
- Plan for the "realistic" worst, hope for the best.

Wild Cards

- Weather conditions throughout the viewing area.
  - People may migrate to the better weather locations.
  - NOAA: Cloudy 65% of the time on April 8.
- Spontaneous pop-up events.
- Cheyenne Wyoming- foreign dignitaries.
- Where visitors will want to view the eclipse.
- Road construction
- Real world event: Fire, tornado, blizzard, civil unrest
- NASA
- Emotions

- People will do what they do!

Good News

- Our utility infrastructure should be able to handle the additional demand for water, sewer, electricity, cable TV and internet.

State Eclipse Webpage

- Centralized location for eclipse information in the State
    - Links to other agency pages for updated information
    - Interactive map for searching for events and resources
- https://ema.ohio.gov/media-publications/ohio-total-solar-eclipse

Eclipse Response Planning Information

- https://eclipse.aas.org/eclipse-america-2024 - American Astronomical Society (AAS) Eclipse Website

- greatamericaneclipse.com – Great American Eclipse Website

- https://eclipse2024.org/ – detailed 2024 eclipse information

- https://www.youtube.com/channel/UC9mnuCTgaFA56i4zZoVr1jw - AAS 2024 Eclipse Workshop Planning Videos

- https://eclipse.aas.org/sites/eclipse.aas.org/files/Russo-White-Paper-Community-Eclipse-Planning.pdf - White Paper on Community-level Eclipse Planning

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Questions?