

2024 TOTAL SOLAR ECLIPSE TRANSPORTATION PLANNING

Genesee / Finger Lakes Region | New York

Aviation Stakeholder Meeting RMSC & Zoom

GTC

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GTC's Role

We don't own, operate or maintain transportation systems, but our member agencies do. As a planning agency, we hope to inform, convene, connect, share resources, and assist our member agencies and stakeholders. We want to be part of the success stories, not traffic-related horror stories.



Jim Stack
Executive Director



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Booth at Fairport Canal Days

Booth at Stroll for Strong Kids

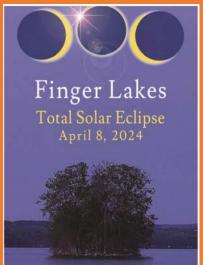
RMSC's Role: Public Outreach & Education We want to make sure that literally everyone under the sun is educated, informed, excited, and prepared for the 2024 Total Solar Eclipse.

Eye Safety

- Never look directly at the sun!
- Eye Safety is critical
- MUST wear solar viewing glasses ("Eclipse glasses")
- Sunglasses do NOT work



















Introductions

Tell us your name, affiliation and what aspect you are most interested in.

Today's Key Messages



Super quick science lesson What's the big deal?



Crowds and Traffic Research from 2017



Preparing for the Single-Biggest Mass Travel Event in the USA

School Closures

Mapping

Arrive Early and Stay
Late
Take Tuesday Too



Stakeholder Awareness Aviation Considerations

Eclipse Awareness

Public Education

Airport Logistics

Special Services Related to the Eclipse

Resources

Quick Science Lesson What's the big deal?



Total Solar Eclipse Basics

Moon is directly in line with the sun casting a shadow on Earth, creating darkness

The air temperature drops, animals behave as if the 360-degree sunset is a sign of nightfall.

Total Solar Eclipse to be visible from US on April 8, 2024.

Monday afternoon April 8, 2024

Note: In Rochester, NY

- Total solar eclipse begins at 2:07 p.m.
- Totality from 3:20 3:23 p.m.
 (3 minutes 38 seconds)
- Total solar eclipse ends at 4:33 p.m.

129
DAYS TO THE ANNILL AR SOLAR ECLIPSE

The Eclipse Daily

Sure 7, 2023

OF OCTOBER 14, 2023

306

DAYS TO THE
TOTAL SOLAR ECLIPSE
OF APRIL 8, 2024

The Total Solar Eclipse of April 20, 2023

This is our composite photograph of the recent total solar eclipse from Australia. From begin to end, the eclipse lasts about 3 hours. We were rewarded with a fantastic view of an active corona near the maximum of the Sun's 11-year sunspot cycle.





But What if it's Cloudy?





It wasn't last year! Maps show cloud cover on April 8, 2023

Will still be an amazing experience.
Will still have tons of visitors
Will still highlight our region.

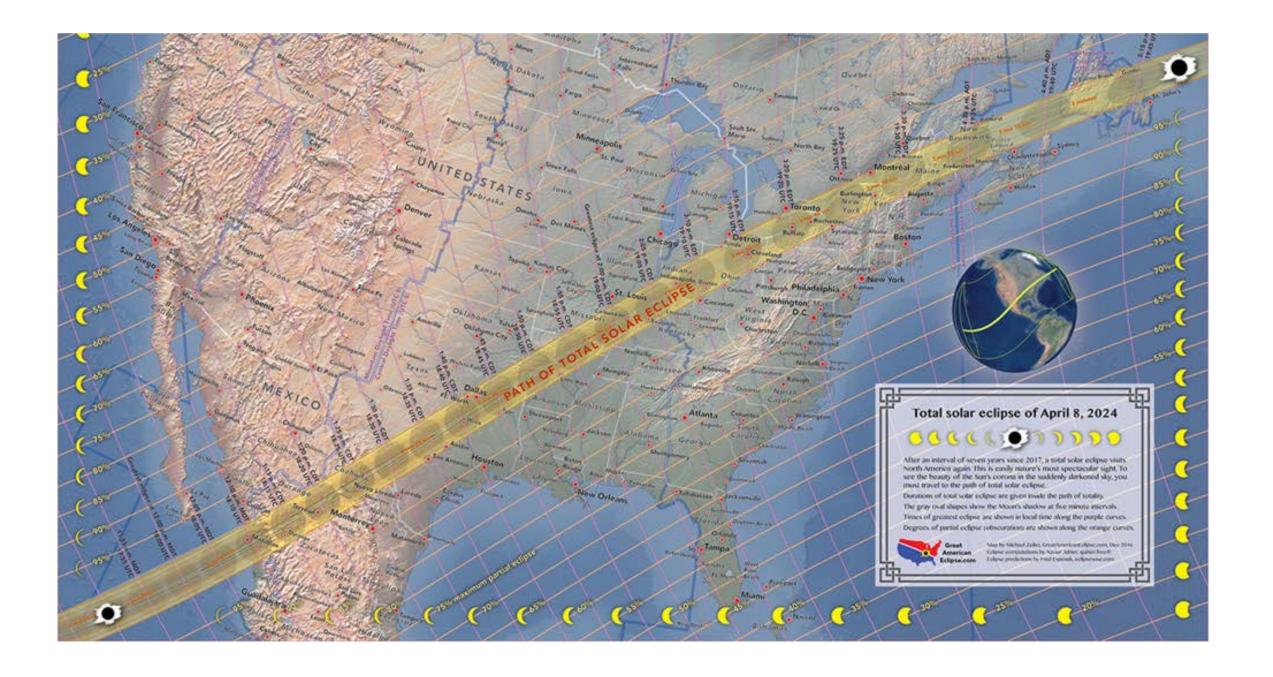
Image: Michael Zeiler GreatAmericanEclipse.com

April 8, 2023 Cloud Cover worldview.earthdata.nasa.gov

WHAT ARE THE ODDS?

ROCHESTER SKY CONDITIONS ON APRIL 8th (AROUND 3pm)







Total Solar Eclipse of April 8, 2024



This eclipse is accessible to the entire US Eastern Seaboard. Philadelphia, Baltimore, Washington DC, New York, and Boston are within 200 miles of the path of totality.

Time of Eclipse

1:30 pm MDT

2:30 pm CDT

3:30 pm EDT

4:30 pm ADT

5:00 pm NDT

Speed of Moon's Shadow 2,775 miles per hour

Duration of Totality 3 minutes, 29 seconds

New York

27 counties in western and northern NY are within the 120-mile-wide shadow.

The rest of New York will experience a partial eclipse with 88.5 – 99.9% coverage and should expect impacts of throughtraffic.



Image credit: iloveny.com/eclipse-2024/



This animation, created by Great American Eclipse, simulates a view of the total eclipse from a spacecraft 100 miles high, chasing the shadow along its arc. 25 seconds: Ohio, Ontario, Pennsylvania & NY



Total Solar Eclipses in the US

24 Jan. 1925

• Last Total Solar Eclipse in **Rochester** 12 Aug. 2045

 Next Total Solar Eclipse in continental US (CA to FL)

TODAY!

R









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21 Aug. 2017

 Last Total Solar Eclipse in United States 8 April 2024

 Total Solar Eclipse to be visible in Rochester on April 8, 2024. 26 Oct. 2144

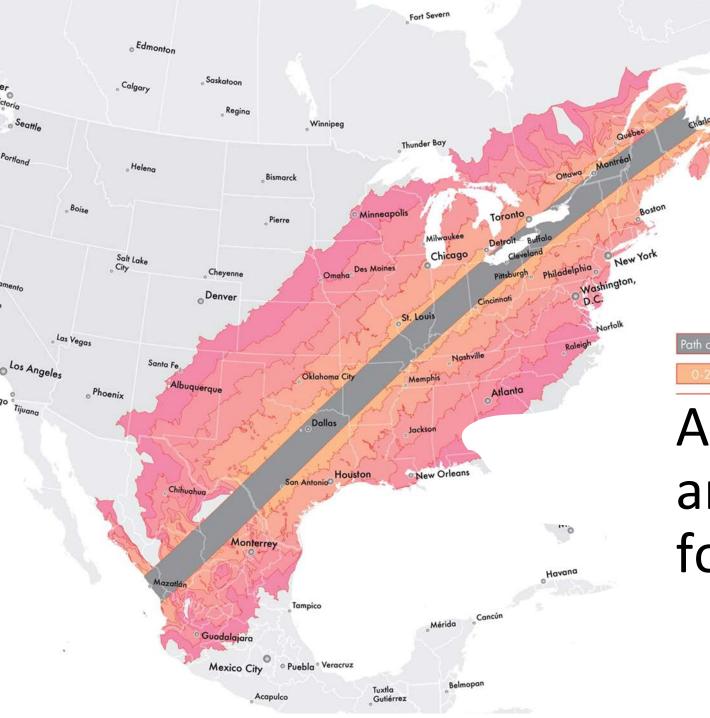
 Next Total Solar Eclipse in Rochester (120 years after 2024 Eclipse!)



Wyoming 2017, Denver Post

Crowds and Traffic

Be prepared for the single-biggest mass travel event in the USA.



Half of the US population lives within 250 miles of the Path

An experience people are willing to travel for!

Population:

32 million people already live within path in USA

3.7 million people live within path in New York State

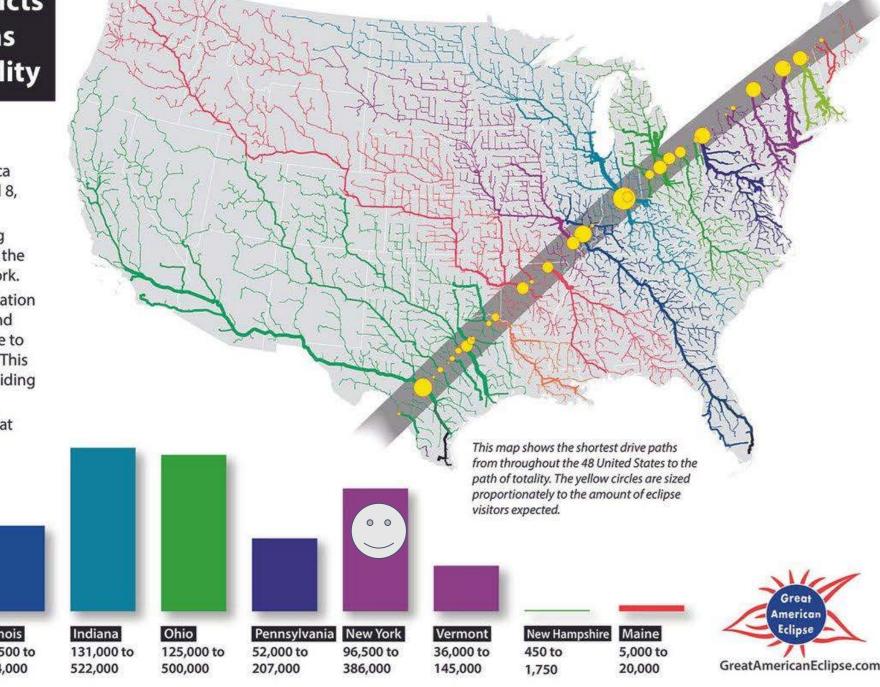
Eclipse Visitation Model Predicts One to Four Million Americans Will Travel to the Path of Totality

A total solar eclipse crosses North America from Mazatlan to Newfoundland on April 8, 2024.

We built an eclipse visitation model using ArcGIS software applied on US Bureau of the Census data and the national road network.

Within the United States, our eclipse visitation model predicts that between **931,000** and **3,725,000** people will travel from outside to inside the path of totality on eclipse day. This is in addition to the 31 million people residing inside the path of totality.

Learn about our eclipse visitation model at greatamericaneclipse.com/visitation



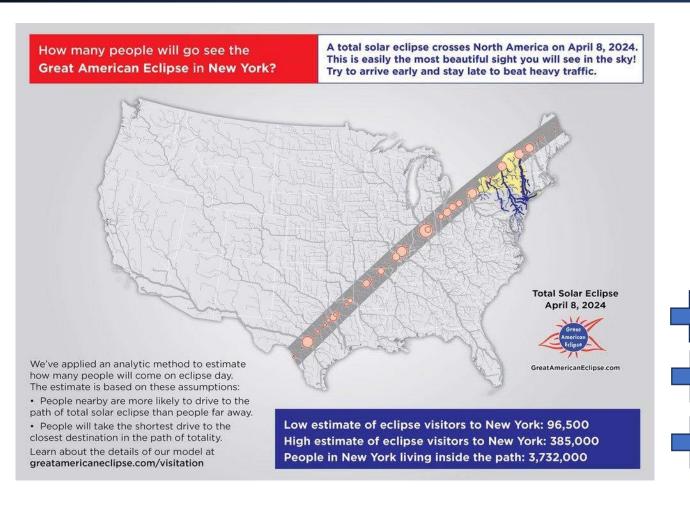
Texas 270,000 to 1,080,000

Arkansas 84,000 to 337,000 Oklahoma 20,000 to 80,000

ma Missouri o 43,000 to 172,000

ssouri Illinois 000 to 68,500 to 2,000 274,000

An experience people are willing to travel for!



Assume 2% of the population is willing to drive at least 200 miles to get into the path of totality in New York State. 385,000

3.7 million already live within the Path in NY About 1 million live in the path in greater Rochester.

What if that percentage is 3% or 5%?

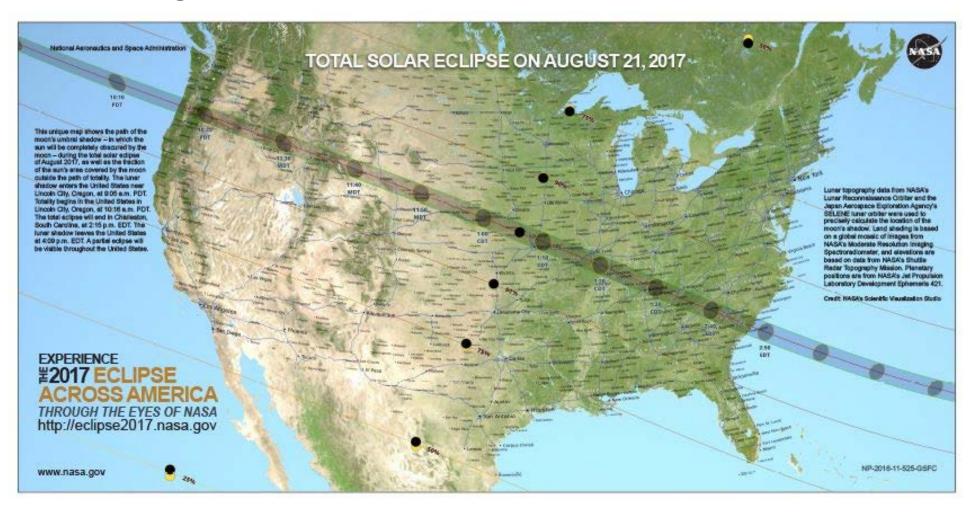
Plus others driving from beyond 200 miles (Friends and family from down south? Ex. North Carolina is 600 miles (11 hours.)

Plus international visitors

Plus air travel???

Lessons from August 21, 2017 Eclipse

Path from Oregon to South Carolina



Reports from August 2017



Illinois 2017, Chicago Tribune

- Most viewers traveled to the path of totality by motor vehicle, (Also RV, camping vans, tour bus, school busses, other modes)
- People traveled from around the world
- People arrived 1-4 days pre-eclipse (For us, it will be Friday-Sunday, April 4-7.)
- Most people departed in the 2 hours post-totality. (For us, it will be by 5:30 p.m.)
- Many may depart in first <u>15 minutes</u> post totality
- Rural, non-freeway routes also experienced significant traffic congestion, slow speeds, and long travel times



Aircraft Owners & Pilots Association (AOPA)



Aircraft Owners and Pilots Association (AOPA) highlighted events from the eclipse that was visible from the US in August 2017 on their webpage with a lengthy video, maps, photos, and information.

https://www.aopa.org/news-and-media/all-news/2017/august/21/total-solar-eclipse-draws-thousands-of-aviators

Preparing for a mass travel event

School Closures RMSC Community Eclipse Ambassador Program Mapping Travel Campaigns

Submit your known community events on the Eclipse webpage. https://rochestereclip se2024.org/events/

Byron

afford

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Pavilion

Covington

(246)

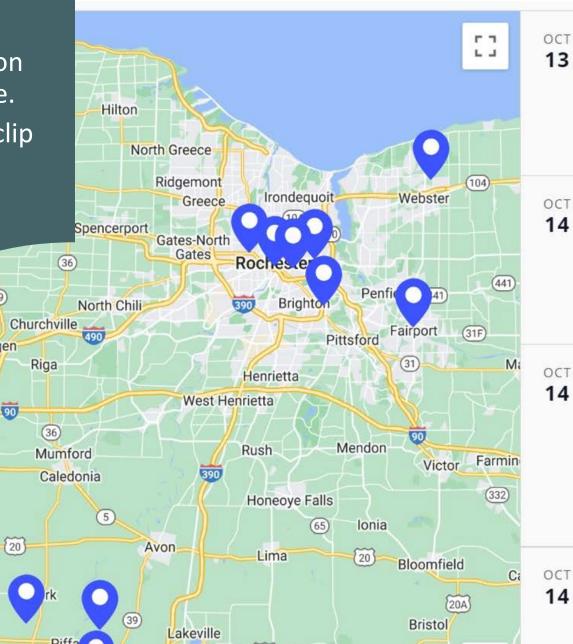
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Bergen

Le Roy

90

[20]



OCT 2:30 PM - 4:00 PM

13 IDEAS THAT MATTER LECTURE FROM TYLER NORDGREN

> SUNY GENESEO 1 COLLEGE CIRCLE, GENESEO

OCT FEATURED 9:30 AM - 3:00 PM

> PARTIAL ECLIPSE VIEWING PARTY AT RMSC

RMSC 657 EAST AVE, ROCHESTER

10:00 AM - 2:00 PM OCT

> **FALL FUNDRAISER AND ECLIPSE VIEWING**

TOWN OF YORK HISTORICAL SOCIETY 2431 DOW ROAD, YORK

OCT 10:00 AM - 4:00 PM

THE PARTIAL ECLIPSE ROCS AT LAUGHING GULL CHOCOLATES

Traffic Considerations



Carbondale, IL 2017, The State Journal Register

Where will people park?

Should roads be closed?

Should they be one-way?

Need to plan for emergency services – create a lane?

Pre-deployed resources?

Routine travel still needs to be accommodated.

Event Parking Considerations

- Accessible parking near venue. Go beyond the minimum!
- Other parking can be farther away
- Need to prepare for mass exodus
- Vehicle and pedestrian circulation
- Different routes for entry and exit?
- Surface lot operations versus parking structure operations
- Parking attendants
- Paid parking? Collect on entry (special event)?
- Shuttles?





Arrive Early and Stay Late



Partnering with the full Rochester Task Force to share information about tourism, science education and community.

2024 NCAA Division I Men's Basketball Tournament

"Come for the sun, stay for the stars!"

#TakeTuesdayToo

Prepare the Guest Bedroom!

Our region is becoming very popular with everyone who lives outside of the path of totality. We expect many people to travel here to watch the eclipse with friends and family.



Encourage your guests to arrive early and stay late to avoid heavy traffic conditions during eclipse week. Consider taking Tuesday, April 9th off, too, to explore Greater Rochester!

#TakeTuesdayToo

This message is from the Transportation Sector of the Rochester Total Solar Eclipse Task Force. Learn more ways to prepare at rochestereclipse2024.org #ROCSolarEclipse

Stakeholder Awareness Aviation Considerations

Eclipse Awareness

Do you feel the owners, operators, tenants, and staff/volunteers are informed about the eclipse and scale of impact it could have?

Public Education

Airports are ideal locations to engage learning and enhance experiences for people the day of the eclipse, plus the night before.

High-altitude balloon lifts, science experiments, solar viewing, nighttime sky viewing, etc. are ways to promote science education.

Airport Logistics

What concerns come to mind from the air travel perspective? Maybe it is flight or ground support related, overcrowding at the airport, ground transportation for airport employees/volunteers?

Do you know how many aircraft your airport can accommodate? How many can park/tie down? Does that number depend on saturated/snowy grassy areas?

For uncontrolled airports, do you have enough qualified volunteers to help direct plane traffic?

Are the grounds of the property contained with a fence or other barrier to control access?

If your airport offers fuel, be sure to arrange for ample inventory a few days beforehand. This is especially important if fuel is delivered by trucks on busy highways the days leading up to April 8.

If your airport offer maintenance/repair services, is your parts room stocked adequately?

Special Services Related to the Eclipse

- Do you have a way to anticipate air traffic that day? Would an advanced registration system be useful?
- Are you aware of any groups/clubs planning a special event that day?
- What other measures could you take to forge relationships with pilots and encourage repeat business? Extra restrooms, extra cell phone chargers?
- Have you considered having food available in the form of vendors or catering?
- If weather permits, are you prepared for pilots and visitors to camp overnight?
- Are trong expecting a let of trobiale traffic to trong eigenest grounds on calings dots

Event Plans at Other Airports

2024 Eclipse Fly-In Flying In The Dark Lawrenceville, Illinois

(KLWV) Lawrenceville-Vincennes International Airport https://midairevents.com/

https://www.aopa.org/destinations/event/86

Using Airports in the path of 2024 Totality as viewing spots

What else comes to mind?

Resources



www.RochesterEclipse2024.org @ROCSolarEclipse Facebook, Twitter and Instagram

• www.publicinput.com/GTCEclipse

www.publicinput.com/GTCEclipse



2024 Total Solar Eclipse Transportation Planning Sector

The primary objective of this transportation planning task is to ensure transportation and other public safety agencies are well-informed, prepared, and ready to execute thorough plans to safely operate and maintain the transportation system in the days leading up to, during, and following the Total Solar Eclipse on April 8, 2024.



2024 Total Solar Eclipse An Experience Worth Traveling For





8, 2024 at

3:20pm.



Everyone under the Sun will learn about science and make life-long memories.



Seeing a Total Solar
Eclipse from
Rochester happens
once in a lifetime!
Last time: 1925
Next time: 2144

People will travel to
get inside the path
making the Rochester
region very popular.
It could easily attract
500,000+ visitors
from around the
world!



This popularity will generate tourism, boost local economies, and showcase our region well into the future.

@ROCSolarEclipse



#roceclipse2024

www.rochestereclipse2024.org



Eclipse Transportation Planning: Aviation

Our goal is for people in the transportation industry to be informed and prepared for people near and far to safely view the solar eclipse, discover new ideas, make connections and be a positive part of...

Learn more

More Resources



GTC Eclipse Transportation Planning:

publicinput.com/gtceclipse

Maps and Data, Illustrations, Videos, Simulations, etc.

- GreatAmericanEclipse.com
- NASA https://solarsystem.nasa.gov/eclipses/
- https://eclipse.aas.org/

Lessons learned from across the country in 2017

- National Center for Excellence in Operations webinars
- Eclipse2024resources.com
- Dr. Kate Russo Community Planning White Paper and author of books
- TR News article (Transportation Research Board's magazine)

Contact Information

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