



2024 Total Solar Eclipse

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2024 Total Solar Eclipse

- ▶ Occur somewhere on earth every 18 months
- ▶ Specific location – a rare event
 - ▶ Once every 400 years
- ▶ Next total solar eclipse in Northumberland County
 - ▶ 2399 (375 years)



Path of totality

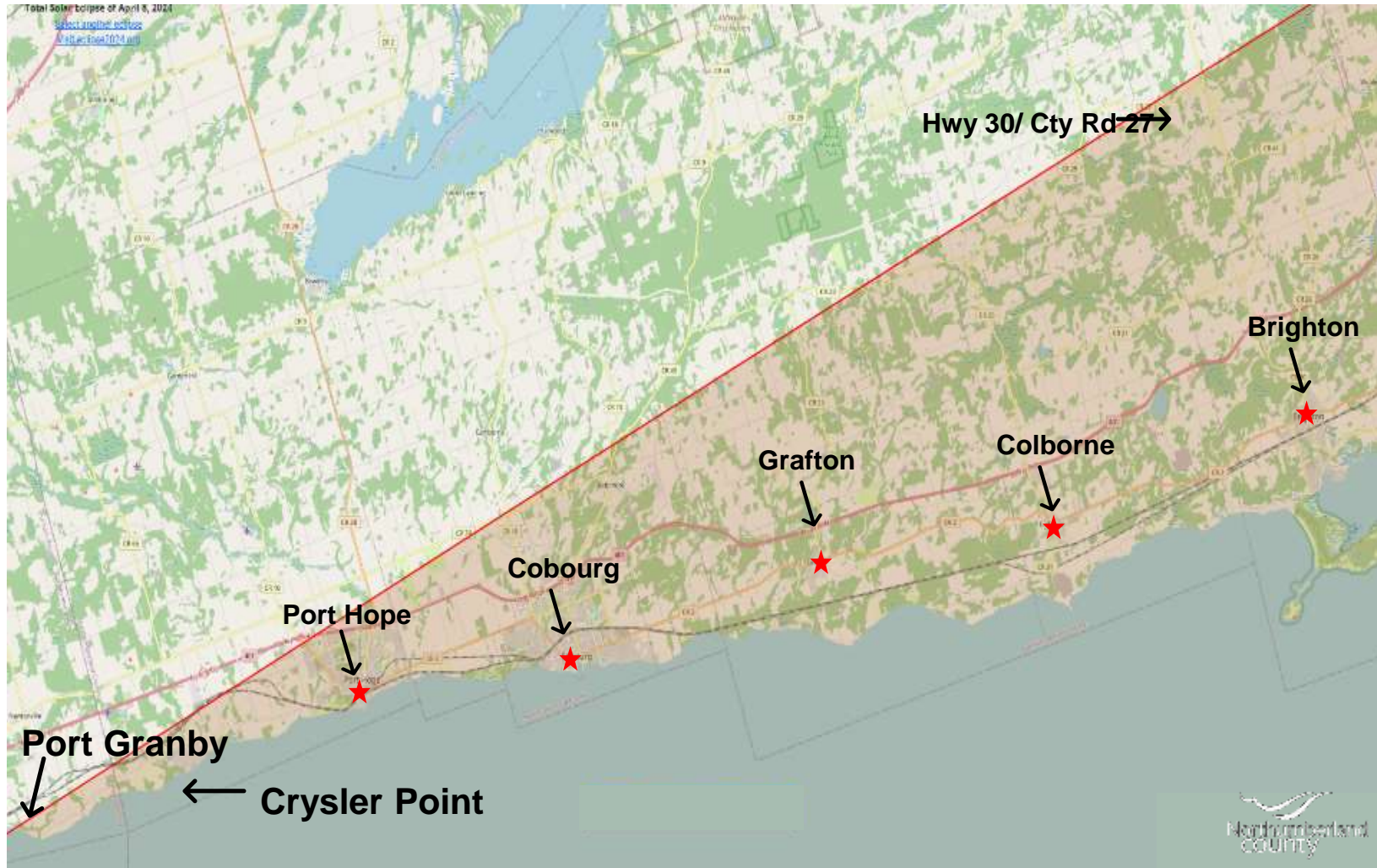
- ▶ Passes through southern Ontario
- ▶ Approximately 180 kms wide



Why so special?

- ▶ 2017 total solar eclipse (USA)
 - ▶ Largest temporary mass migration
 - ▶ Larger than any scientific, athletic or entertainment event ever recorded
 - ▶ 88% of American Adults viewed the eclipse
- ▶ 2024 total solar eclipse
 - ▶ Longer totality event
 - ▶ Covers larger urban area
 - ▶ 42 million in path vs 12 million in 2017

Path of totality in Northumberland



Eclipse timing

| <u>Location</u> | <u>Partial</u> | <u>Full Totality</u> | <u>Totality Duration</u> |
|-----------------|----------------|----------------------|--------------------------|
| Port Hope | 14:06:47 | 15:20:59 | 0m 55.5s |
| Cobourg | 14:06:59 | 15:20:56 | 1m 21.5s |
| Colborne | 14:07:24 | 15:21:02 | 1m 51.7s |
| Grafton | 14:07:12 | 15:21:00 | 1m 34.7s |
| Brighton | 14:07:39 | 15:21:10 | 1m 59.9s |



What to expect

- ▶ Gradual dimming of natural light
- ▶ Sky will go dark
- ▶ Drop in temperature 5-8 degrees
- ▶ Changes in wildlife and plants
- ▶ Emotional experience



What to prepare for

- ▶ **Influx of people**
 - ▶ Impact to health care services
 - ▶ Increased demand for emergency services
 - ▶ Increased use of internet and cell service
 - ▶ Traffic congestion
 - ▶ Potential mass exit
- ▶ Increased demand on local services
- ▶ Number of visitors unknown
- ▶ Weather variables
- ▶ Unknown gathering sites



County preparedness

- ▶ Hazard Identification Risk Assessment
- ▶ Mock exercise
- ▶ Total solar eclipse workshops and presentations
- ▶ Collaboration with CEMCs and evacuation partners
- ▶ Provincial working group
- ▶ Enhanced monitoring
- ▶ Communications plan
- ▶ Continuity planning



Health and safety

- ▶ **Eye safety**
 - ▶ Never look at the sun without protection
 - ▶ Only use ISO 12312-2 special filtered certified glasses
 - ▶ Purchase from a reputable vendor
 - ▶ Never use regular sunglasses
- ▶ More information on County website



Emergency preparedness for residents

- ▶ Make a plan
- ▶ Have an emergency kit
- ▶ Be prepared to take care of you and your family for up to 72 hours



Questions?

- ▶ Northumberland County
 - ▶ northumberland.ca/NoCoEclipse
- ▶ NASA
 - ▶ science.nasa.gov/eclipses/media/resources
- ▶ Royal Astronomical Society of Canada
 - ▶ rasc.ca