

## WeatherOptics 7-Day Storm Analysis

July 31, 2020, 10am ET

### Storm 1: Hurricane Isaias

- Hurricane Isaias, located in the Caribbean 70 mi northeast of Cuba with maximum sustained winds of 81mph as of Friday morning, is barreling toward the Southeast US Coast and is expected to deliver strong winds, heavy rain, and destructive storm surge to much of the East Coast
- Isaias is expected to pass by Florida's East Coast this weekend en route towards North Carolina, where it will make landfall or pass just east of the Outer Banks before continuing towards the Northeast Coast, where another (or first) landfall is possible
- Sea surface temperatures warm enough to maintain or grow a tropical cyclone exist as far north as New Jersey, so Isaias could hold onto tropical storm or hurricane intensity as it approaches the heavily-populated Northeast
- The heaviest rain and winds are expected on the north and east flanks of the storm such that impacts to Florida's East Coast will be relatively spared but North Carolina and possibly the coastal Northeast could be confronted with life-threatening conditions
- Regardless of intensity, Isaias is expected to be a quick-hitting storm and is expected to gain momentum as it treks up the east coast, with heavy rain and wind only lasting 8-12 hours.
- Expect flash flooding, minor to moderate river flooding, brief sustained winds of 50 - 70 mph, and damaging storm surge in coastal areas from southeast Florida to southern New England. Rainfall totals of 3-6" or more are possible east of the Appalachians in the Carolinas, Mid-Atlantic, and southern New England.
- Precise impacts are uncertain and highly dependent on the eventual storm track. The heaviest rain and wind will be focused near the storm's center. There's a slight chance that the storm goes out-to-sea without making landfall and an even slighter chance that it enters the Gulf of Mexico before recurving northeast.
- Affected Routes:
  - Miami to Atlanta along I-95 between 12pm ET Saturday and 2am ET Monday. Use I-75 to avoid significant impacts.
  - Boston to Washington, D.C. along the entire route between 10pm Monday and 10pm ET Tuesday
  - New York to Chicago in NYC and along I-80 in New Jersey between 4am ET and 2pm ET
  - Los Angeles to New York in NYC and along I-80 in New Jersey between 4am ET and 2pm ET

## **Storm 2: Ohio Valley and Northeast Flash Flooding and Severe Weather**

- A robust upper-level low pressure system will draw a slog of rich tropical moisture that will overspread the Ohio Valley Saturday and then the Northeast Saturday night through at least Tuesday, generating scattered to widespread thunderstorms. Some of the storms will be severe Sunday afternoon in the Northeast.
- Low pressure will push a warm front that will spread torrential downpours from the Ohio Valley Saturday morning to the interior Northeast Saturday night while dragging a cold front that will spark brief but intense downpours across the Rust Belt Saturday night through Sunday morning
- Expect areas of flash flooding in the Ohio Valley and Rust Belt Saturday through Sunday morning
- The surface low will eject into Canada Sunday but its parent upper-level low will remain in place through at least midweek, keeping heavy rain chances in place in the Northeast through Tuesday and possibly Wednesday regardless of impacts from Hurricane Isaias.
- The focus of the showers and thunderstorms will be along and west of the Appalachians Sunday and expand toward the coast beginning Monday but heavy rain is possible *anywhere* in the Northeast each day.
- Sunday will be the wettest and most hazardous day for areas not impacted by Isaias.
- Sunday's storms will pop up early in the afternoon and could develop into robust supercell thunderstorms capable of producing damaging winds, nickel-sized hail, and a few tornadoes.
- By Sunday evening the storms could merge into strong bowing segments capable of producing powerful straight-line winds
- Tornado-generating supercells will be possible in NY, NJ, and PA but will be most likely in Upstate New York
- Affected Routes:
  - Houston to Detroit along I-55, I-57 and I-70 through Indianapolis between 10am Saturday and 8am ET Sunday
  - New York to Chicago along I-80 east of Elkhart between 2am ET Sunday and 9pm ET Sunday
  - Los Angeles to New York along I-80 east of Elkhart between 2am ET Sunday and 9pm ET Sunday
  - Philadelphia to Buffalo along the entire route between 2am and 8am Sunday, and between 1pm ET and 8pm ET Sunday
  - Boston to Washington, D.C. north of Wilmington, DE between 3pm ET Sunday and 9pm ET Sunday

Route	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
Boston to Washington, DC Possible Route Disruptions			5	5	7		
Philadelphia to Buffalo Possible Route Disruptions			6		5.5		
New York to Chicago Possible Route Disruptions			5.5		7		
Los Angeles to New York Possible Route Disruptions			5.5		7		
Los Angeles to San Francisco Possible Route Disruptions							
Dallas to Houston Possible Route Disruptions							
Houston to Laredo Possible Route Disruptions							
Houston to Detroit Possible Route Disruptions		5	5.5				
Miami to Atlanta Possible Route Disruptions		6	6				
Minneapolis to Fargo Possible Route Disruptions							



# Daily Route Impact

**Friday**



### Areas of Concern

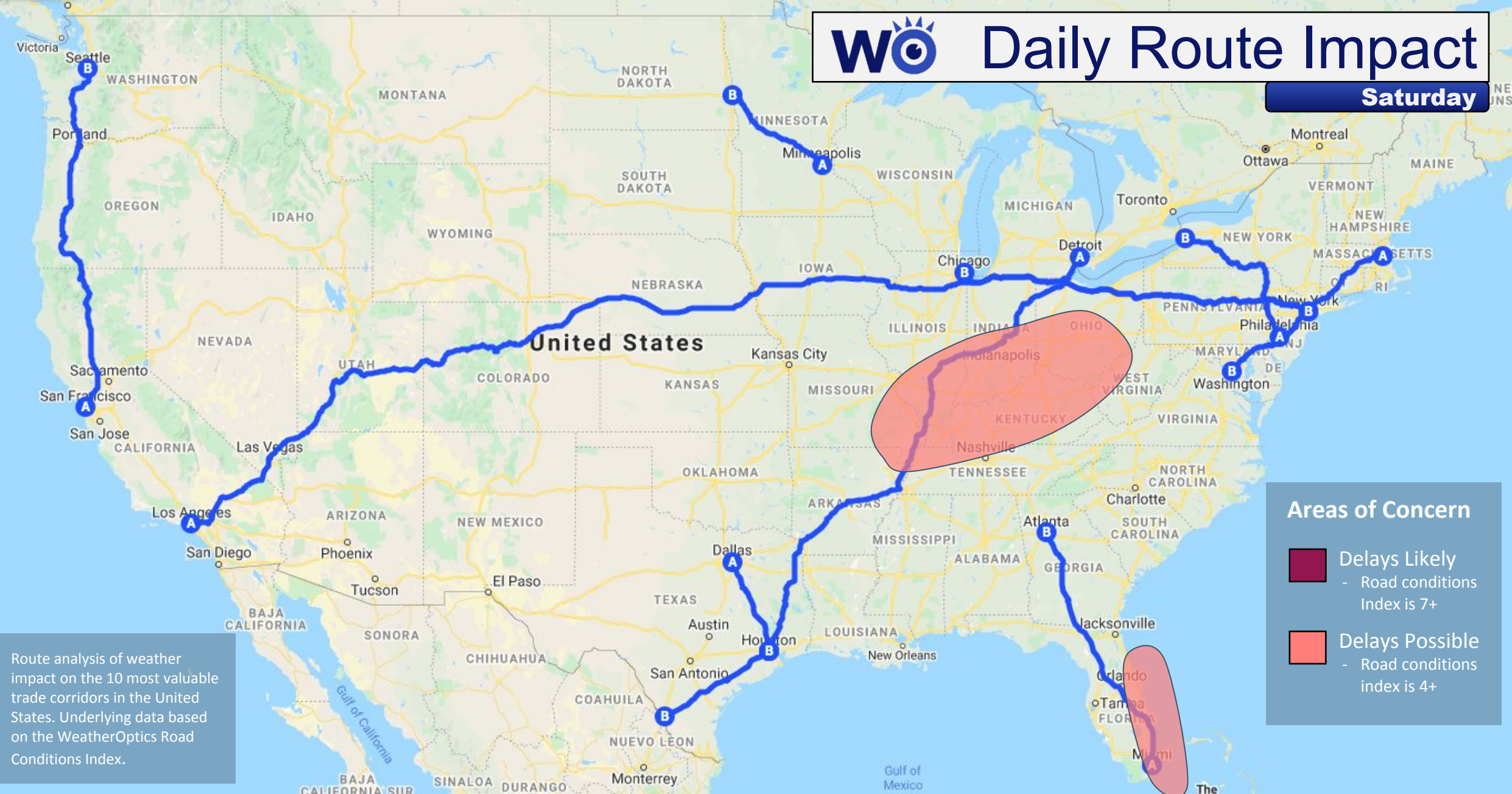
- Delays Likely**  
- Road conditions Index is 7+
- Delays Possible**  
- Road conditions index is 4+

Route analysis of weather impact on the 10 most valuable trade corridors in the United States. Underlying data based on the WeatherOptics Road Conditions Index.





# Daily Route Impact

**Saturday**



United States

### Areas of Concern

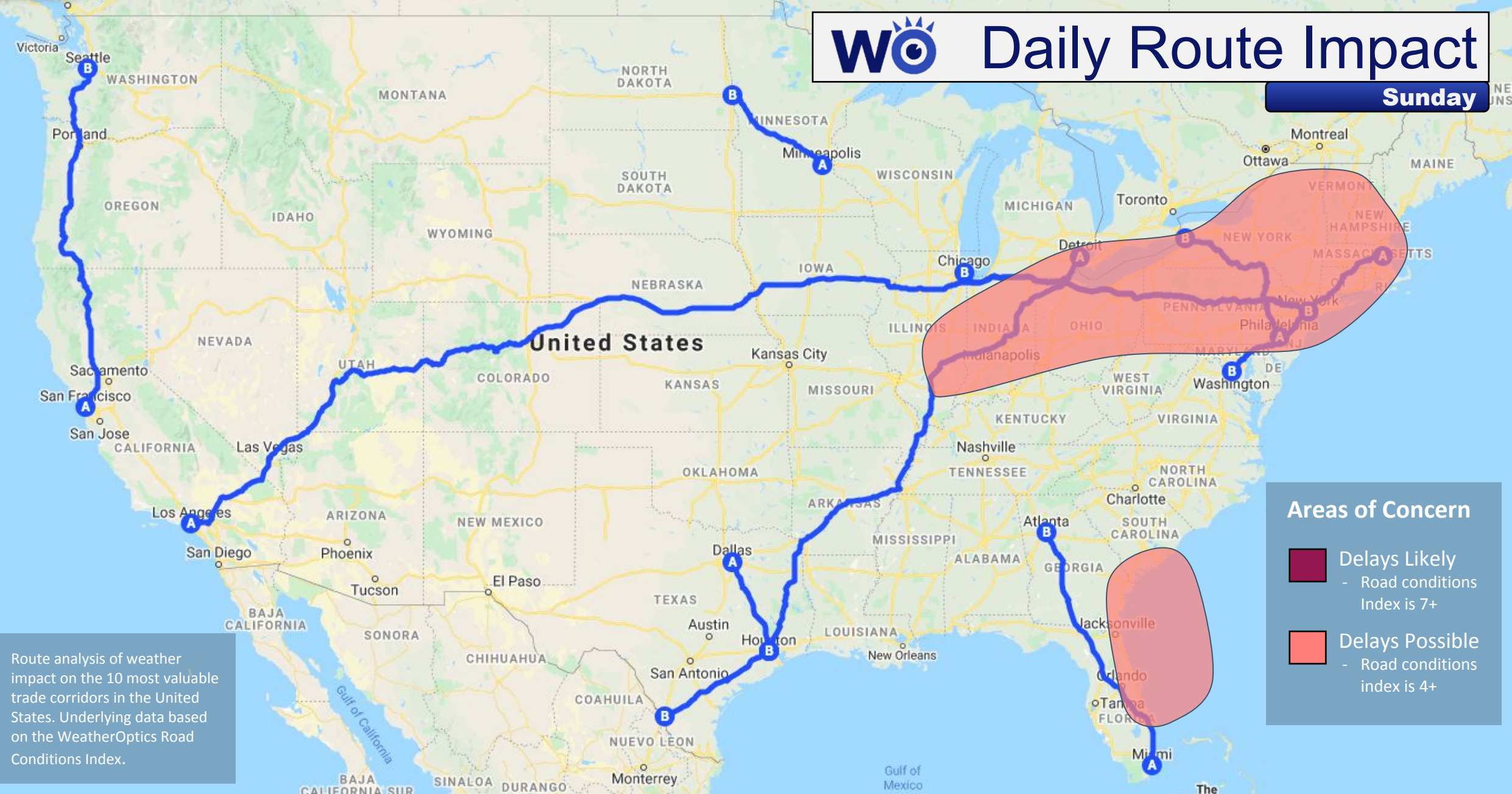
-  **Delays Likely**  
- Road conditions Index is 7+
-  **Delays Possible**  
- Road conditions index is 4+

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# Daily Route Impact

Sunday



United States

### Areas of Concern

-  Delays Likely  
- Road conditions Index is 7+
-  Delays Possible  
- Road conditions index is 4+

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# Daily Route Impact

**Monday**



United States

## Areas of Concern

-  Delays Likely  
- Road conditions Index is 7+
-  Delays Possible  
- Road conditions index is 4+

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# Daily Route Impact

**Tuesday**



### Areas of Concern

-  **Delays Likely**  
- Road conditions Index is 7+
-  **Delays Possible**  
- Road conditions index is 4+

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# Daily Route Impact

**Wednesday**



**United States**

## Areas of Concern

-  **Delays Likely**  
- Road conditions Index is 7+
-  **Delays Possible**  
- Road conditions index is 4+

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# Daily Route Impact

Thursday



## Areas of Concern

-  Delays Likely
  - Road conditions Index is 7+
-  Delays Possible
  - Road conditions index is 4+

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