

# Resilient Ways Forward

## Transportation planning for our changing climate









### How is the climate changing?

### Step 1: Data Collection

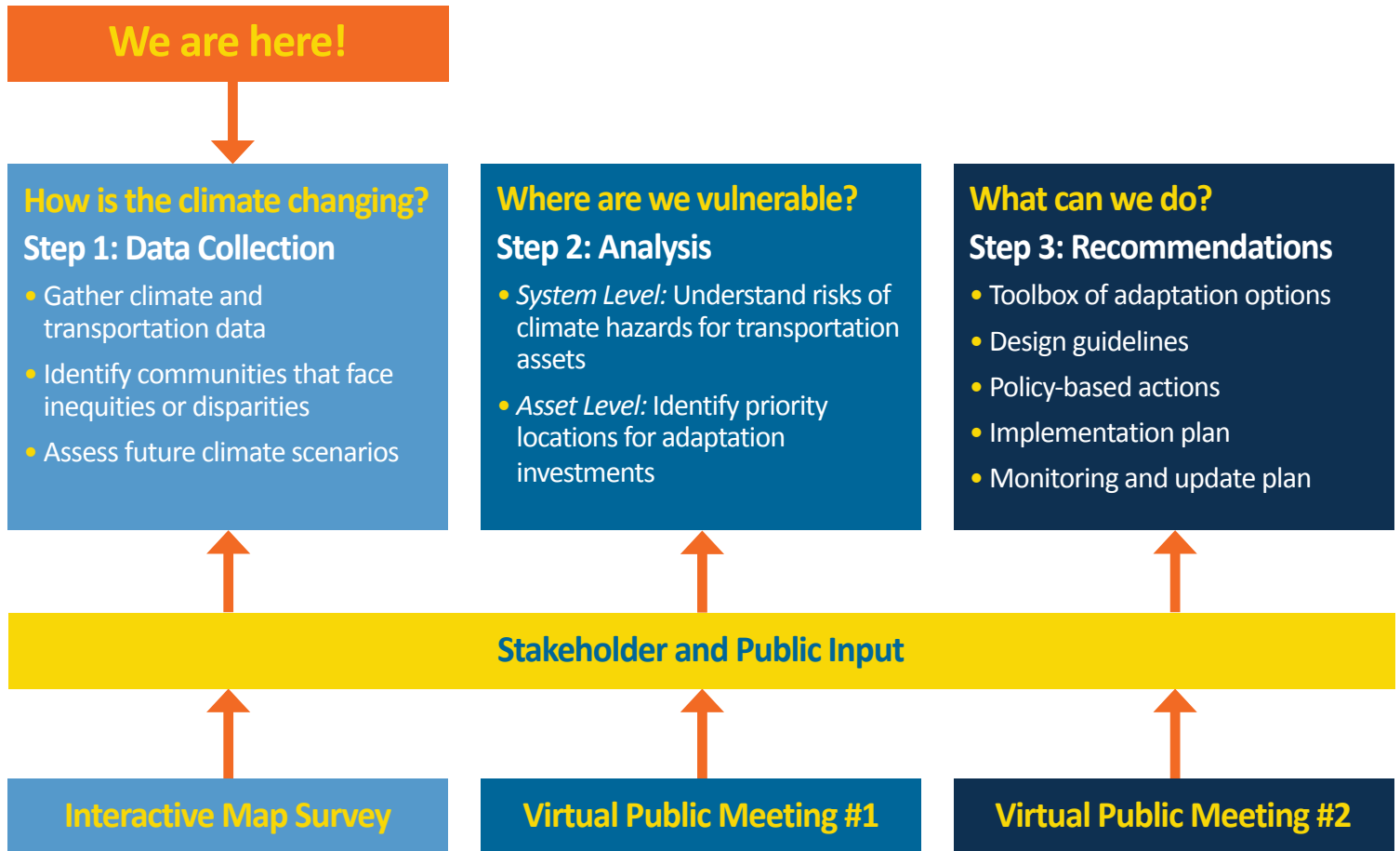
To become more resilient to climate change, we need to better understand regional climate trends and the likely impacts on our transportation system.

## Climate Hazard Summary for Dutchess County

Hazard	Current	Future	Transportation Concerns
 Temperature	<ul style="list-style-type: none"> <li>Average annual temperature has increased by nearly 3°F since 1960</li> <li>High temperatures occur with greater frequency and intensity</li> </ul>	<ul style="list-style-type: none"> <li>Average temperatures continue to rise</li> <li>More extreme temperatures will occur</li> </ul>	<ul style="list-style-type: none"> <li>Pavement can soften, crack, or buckle</li> <li>Rail lines can buckle</li> <li>Travelers experience discomfort</li> </ul>
 Flooding	<ul style="list-style-type: none"> <li>About 44 inches of rain/year</li> <li>Many extreme precipitation events</li> <li>Hudson River water level has risen more than one foot since 1900</li> </ul>	<ul style="list-style-type: none"> <li>Precipitation will become increasingly variable</li> <li>More frequent and intense heavy rain events</li> <li>Sea level rise and storm surge along the Hudson River more frequently</li> </ul>	<ul style="list-style-type: none"> <li>Damage to roads, bridges, and rail lines</li> <li>Closures, delays, and safety risks</li> </ul>
 Drought	<ul style="list-style-type: none"> <li>Notable flash droughts in 2002, 2017, and 2022.</li> </ul>	<ul style="list-style-type: none"> <li>Longer periods without precipitation</li> </ul>	<ul style="list-style-type: none"> <li>No direct impacts</li> </ul>
 Wind	<ul style="list-style-type: none"> <li>Multiple high wind events</li> </ul>	<ul style="list-style-type: none"> <li>Greater potential for high winds as intensity of hurricanes, tropical storms, and tropical depressions increases</li> </ul>	<ul style="list-style-type: none"> <li>Speed or travel restrictions</li> <li>Road closures</li> <li>Damage to traffic signals, road signs</li> </ul>
 Winter Conditions	<ul style="list-style-type: none"> <li>Winters have warmed 3x faster than summers</li> <li>Later snowfall and earlier snowmelt</li> </ul>	<ul style="list-style-type: none"> <li>Fewer days below freezing (32°F)</li> <li>Greater snowfall during major winter storm events</li> </ul>	<ul style="list-style-type: none"> <li>Dangerous driving conditions</li> <li>Speed or travel restrictions</li> <li>Road closures</li> <li>Increased maintenance costs</li> <li>Roads can crack and buckle</li> </ul>
 Landslides	<ul style="list-style-type: none"> <li>Southern and eastern parts of Dutchess County at risk due to steep slopes</li> </ul>	<ul style="list-style-type: none"> <li>Precipitation-driven landslides could occur more frequently</li> </ul>	<ul style="list-style-type: none"> <li>Major damage to infrastructure</li> <li>Safety risks for travelers</li> </ul>

# Resilient Ways Forward

The Dutchess County Transportation Council is preparing a Climate Vulnerability Assessment of our transportation system. The Climate Vulnerability Assessment, titled **Resilient Ways Forward**, will identify locations where our transportation system is most vulnerable to the impacts of climate change. It will also find ways to adapt to or reduce the adverse impacts of climate change on our transportation system.





## Stay Informed

- This fact sheet provides an overview of the **Climate Change Summary Report**. [Read the full report](#)
- Visit [ResilientWaysForward.com](https://www.ResilientWaysForward.com) to learn more and to sign up for email updates.
- Have extreme weather events affected your ability to get around? We want to hear from you! Add comments to our interactive [Map Survey](#)



 [www.ResilientWaysForward.com](https://www.ResilientWaysForward.com)  
[dctc@dutchessny.gov](mailto:dctc@dutchessny.gov)

 Dutchess County Transportation Council  
85 Civic Center Plaza, Suite 107  
Poughkeepsie, NY 12601

 (845) 486-3600