

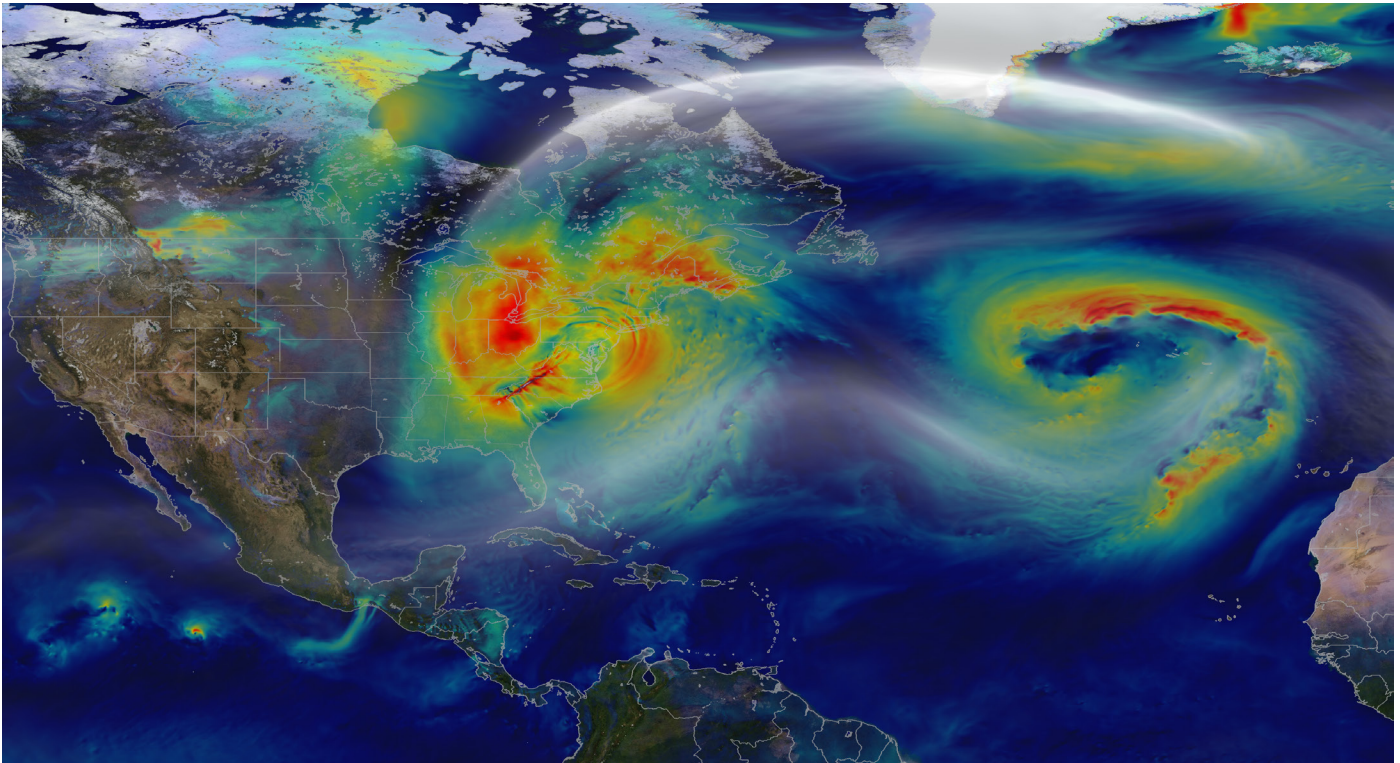


Ask a Climatologist! Event Summary

Location: Online event

Date: Thursday, January 21, 2021

Time: 6-7 pm



About UpNext North Jersey

UpNext North Jersey (UpNext) is an emerging leaders group that engages young North Jersey residents in a dialogue with the North Jersey Transportation Planning Authority (NJTPA). The NJTPA seeks to better understand the values and needs of this demographic group related regarding key transportation and land use issues. The NJTPA provides UpNext members with unique opportunities to learn about and discuss timely topics related to regional planning and public policy, develop a network of peers who share similar interests, and engage with regional thought leaders and decision-makers.

The Public Outreach and Engagement Team, part of the Voorhees Transportation Center at Rutgers University (Rutgers-POET) works with the NJTPA to plan quarterly events for UpNext members. This is the third UpNext event for FY 2020-2021, following events on active transportation in September and emerging transportation technology in December.

Overview of the *Ask a Climatologist* Event

This event focused on the topic of climate change in New Jersey, following the publication of the NJTPA's *Plan 2050* background paper titled *Climate Change and Transportation*. The event consisted of a presentation and discussion with Dr. David Robinson, NJ State Climatologist and Distinguished Professor of Geography at Rutgers University. Dr. Robinson's presentation on climate change science covered how climate change and weather patterns affect New Jersey communities and how climate change's impacts will grow over time, particularly regarding transportation assets.

Planning and Promotion

Leading up to the event, Rutgers-POET worked with NJTPA staff to plan and promote the event. Rutgers-POET promoted the event through social media and email invitations to UpNext members. Members received a save-the-date invitation, followed by several rounds of emails to provide more information. Rutgers-POET also promoted the event on the UpNext Facebook group and created an RSVP page. Prior to the event, Rutgers-POET circulated the Plan 2050 climate change background paper to members and encouraged event attendees to come prepared with questions for Dr. Robinson.

Agenda

6:00 to 6:05 pm – Welcome and Introduction: Ted Ritter, NJTPA staff, gave a brief welcome to attendees and a quick rundown of the NJTPA's report on climate change, after which he introduced Dr. Robinson.

6:05 to 6:30 pm – Presentation on New Jersey's Changing Climate: Dr. Robinson's presentation included recent extreme weather events in NJ; he explained that in recent decades the state's average temperatures have risen and precipitation patterns have become more erratic. Dr. Robinson also described the impacts climate change will cause in the mid-term and how long-term impacts will depend on what is done to reduce greenhouse gas emissions.

6:30 to 7:00 pm – Q&A Session: Dr. Robinson took questions about climate change, its local impacts, and connections to transportation issues. The questions and responses are summarized below.

7:00 to 7:05 pm – Update on Plan 2050 Engagement: Ted Ritter informed members about upcoming opportunities to participate in the Plan 2050 public engagement process. Miriam Salerno, Rutgers-POET, encouraged UpNext members to suggest ideas for future events.

Attendance

Eleven UpNext members attended this virtual event. Jeff Perlman, NJTPA Senior Director of Planning, and Lois Goldman, NJTPA Director of Long Range Transportation Planning, also attended.

Q&A Session Summary

Are there any estimates of population displacement in North Jersey's coastal/tidal regions for a given magnitude of sea level rise?

- » Dr. Robinson: The global population is much more vulnerable to displacement caused by sea level rise (and other climate change impacts). There are projections for displacement caused by sea level rise and evacuations have already happened in parts of coastal Alaska. In New Jersey, the Meadowlands and Jersey Shore communities would be vulnerable. Likely tens of thousands of New Jerseyans would need to move (though it's not clear what degree of sea level rise would precipitate this).

How do we build our infrastructure for today and the future? For example, New York City's LaGuardia airport is an important resource for 30 to 50 more years but will be inundated after that.

- » Dr. Robinson: North Jersey will be one of the last regions protected by hard infrastructure due to the value of the property in this area. The value of commercial and residential properties in metropolitan New York will spur costly investment in hard infrastructure to protect against the impacts of climate change. Facilities like LaGuardia and Newark airports will be protected by seawalls and other built systems for as long as possible.

How will residential and coastline development in Hudson and Bergen Counties be affected by sea level rise?

- » Dr. Robinson: Superstorm Sandy flooded Hoboken due to a Hudson River tidal surge.. As sea levels rise, flooding will become a greater problem for coastal Hudson and Bergen counties. But (as mentioned above), the economic value of these properties will motivate governments to protect them with seawalls and other built features, rather than let the land be abandoned or returned to nature.

NJ TRANSIT's new green buses hold fewer passengers. How do we expand use of energy-efficient buses when they cannot provide the same level of service for busy routes as the older, dirtier buses can?

- » Dr. Robinson: This will hopefully be solved by technological innovation. The problem of reliability affects Rutgers, too: though the University is looking into electric buses to serve students and faculty, current models cannot complete the daily routes that the existing fleet can. North Jersey and other places may need to continue telecommuting after the pandemic to achieve reductions in greenhouse gas emissions stemming from transportation.
- » Ted Ritter: The coronavirus pandemic has created new opportunities for innovation, travel patterns, and flexible work schedules that can reduce travel demand and emissions.

How can we encourage greener freight transportation?

- » Dr. Robinson: Freight should include more rail transit, though NJTPA staff may be more qualified to answer this question.
- » Ted Ritter: The NJTPA already knew that freight traffic would increase exponentially in New Jersey during the next 30 years even without the pandemic. COVID-19 has amplified and accelerated that growth. Smoother and greener freight transportation will be a major challenge for planners.

Do lawns affect climate change?

- » Dr. Robinson: Lawns can have a cooling effect, but in some North Jersey communities, they consume as much as 40 percent of the water supply. Overall, dense cities need more green infrastructure—primarily trees that provide shade and transpiration. Lawns do not provide the same ecological services as trees.

How do you work with state agencies like NJ TRANSIT? Do they come to you with questions and requests for information?

- » Dr. Robinson: Largely, state agencies approach Rutgers University (New Jersey's main research authority on climate change, and the location of the State Climatologist's office) with requests for help with climate change reports. The NJ Department of Environmental Protection's recent report on sea level rise was largely prepared by Rutgers University faculty. In his role as a research professor at Rutgers and the State Climatologist, Dr. Robinson has contributed to a panel organized by the NJTPA which reviewed areas of North Jersey that are especially vulnerable to climate change. He has also briefed the Director of the Port Authority of NY and NJ on the results of a climate report.

Would ferries help with climate emissions?

- » Dr. Robinson: They would likely be helpful, though we may need to improve access to ferries by modes of transportation other than private vehicles.

[Comment] We don't discuss electric bike rebates as a state policy. E-bikes need to be prioritized by the state. .

- » Ted Ritter: Support for e-bikes could be indicated as an active transportation option in Plan 2050.