

EPISTEMIX

COVID-19 Update & Decision Support Dashboard for Event Organizers

John Cordier, CEO

john.cordier@epistemix.com

EPISTEMIX

Informed by decades of work with groups like



World Health
Organization





With funding from

BILL & MELINDA
GATES *foundation*



BASELINE MODEL


 **Digital Population**
Same number as the real population

 **Places of Interest**
Home, work, school, arenas, stores

 **Mobility**
Commutes, events, errands

 **Networks**
Online, social, physical, media


 **Demographics**
Age, gender, income, race

 **Natural Environment**
Land and water features

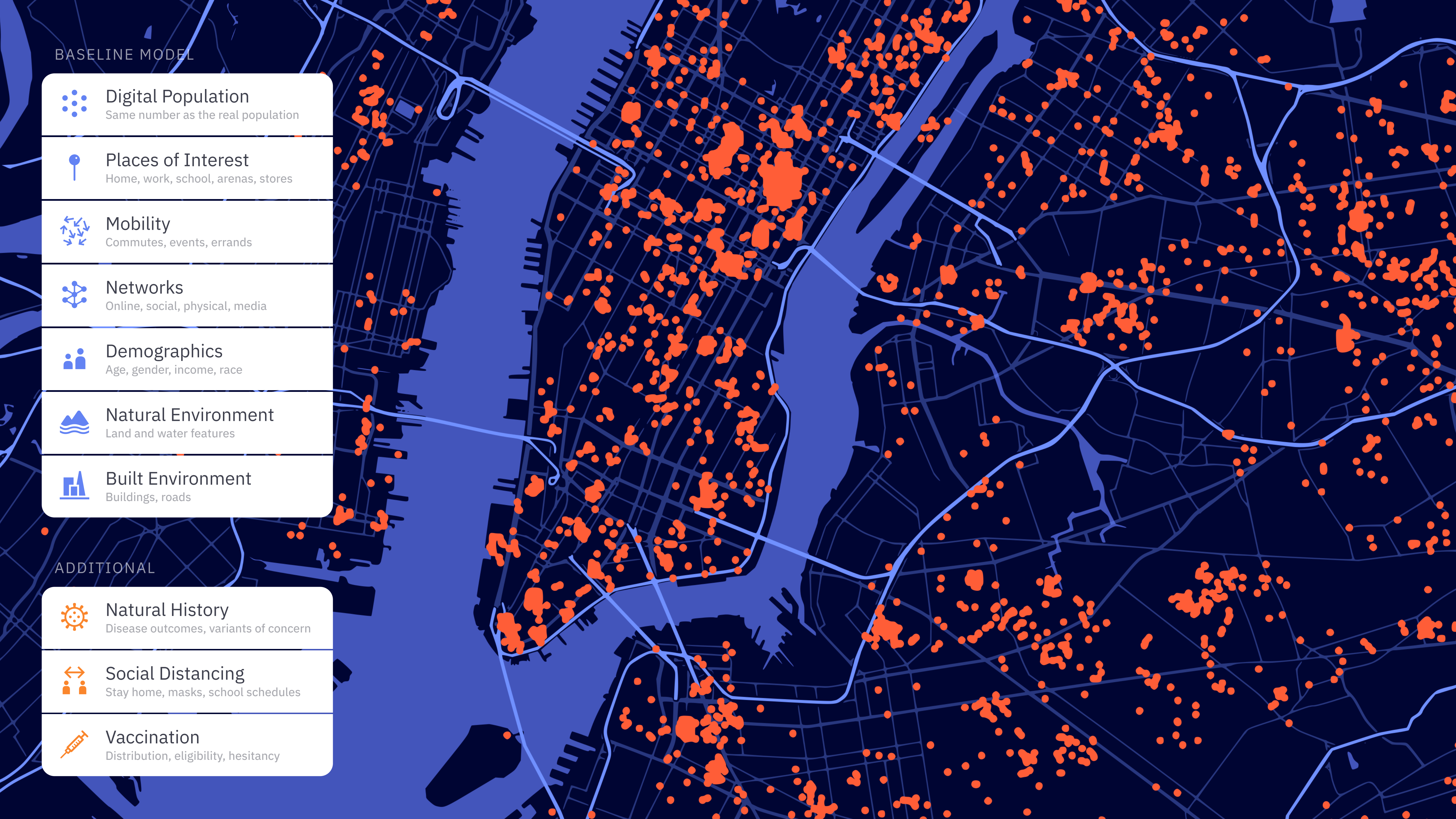
 **Built Environment**
Buildings, roads

ADDITIONAL

 **Natural History**
Disease outcomes, variants of concern

 **Social Distancing**
Stay home, masks, school schedules

 **Vaccination**
Distribution, eligibility, hesitancy

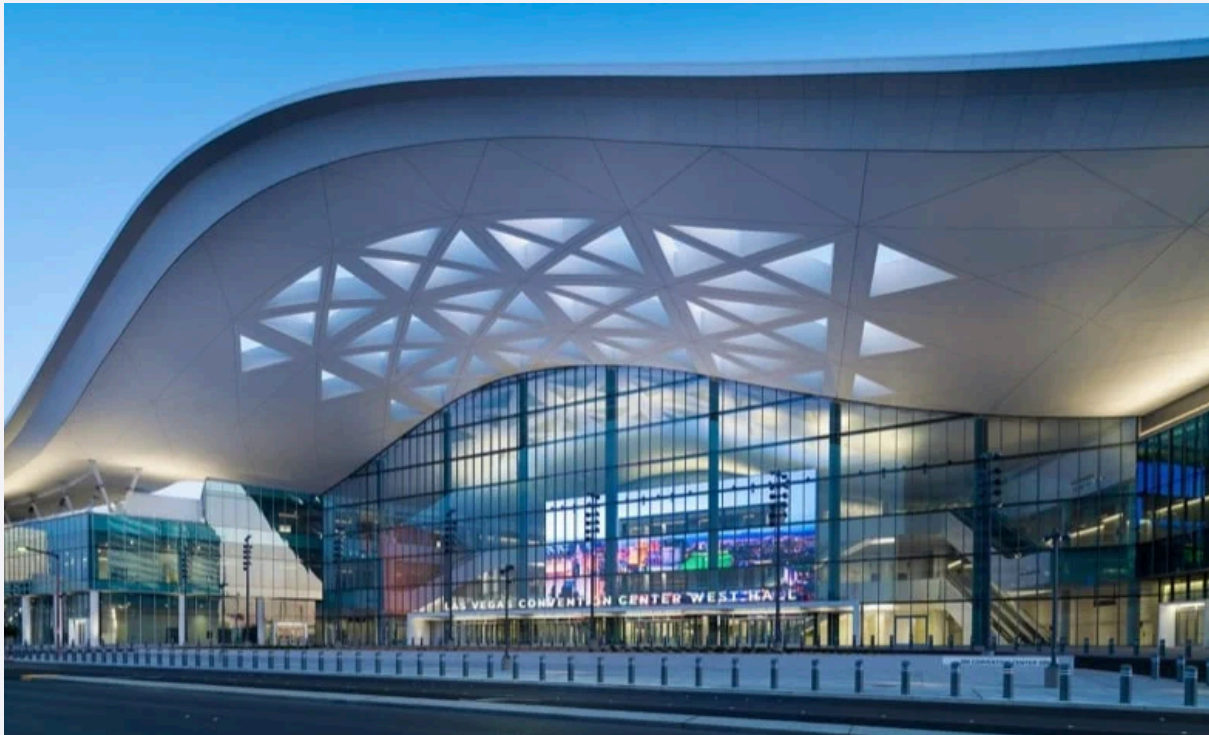




In April, NY NOW used Epistemix simulations to show they could safely host their convention at the Javits Center in August.



In May, the organizers of the Erie County Fair used Epistemix data to earn county and state officials' approval to run their event in August.



In March, the World of Concrete used Epistemix projections to earn approval to host their event at the Las Vegas Convention Center in June.



Chicago regulators used Epistemix models to simulate the epidemiological impacts of the entire event calendar at McCormick Place and across the city.

EPISTEMIX

CASE STUDY

Orlando Convention Center

91-98% accurate

41 / 45 Infections

17 / 18 Infections

3818 / 3898 Total Tests



Even when the overall immunity to COVID-19 was low, we were able to forecast the impact of the epidemic on events and the impact of events on the epidemic; showing both cases and the expected outcome of doing on-site testing upon entry at events.

What are our key insights?

The epidemic has predictable patterns across the United States by region.

This enables organizers to forecast the epidemic months in advance to plan and communicate expectations on safety measures.

The layered approach to safety can avoid cancellations and prevent risks for attendees.

As the overall immunity of the United States increases, organizers can begin to ease back on showing a proof of vaccination or negative test and get to a point of only requiring masks at certain times of the year by location.

Local immunity is the key to recovery.

Cities across the United States will be at different levels of immunity through 2022. Based on the demographics and location of your event, you can create a space that has greater immunity than the local population.

Getting past the media is possible.

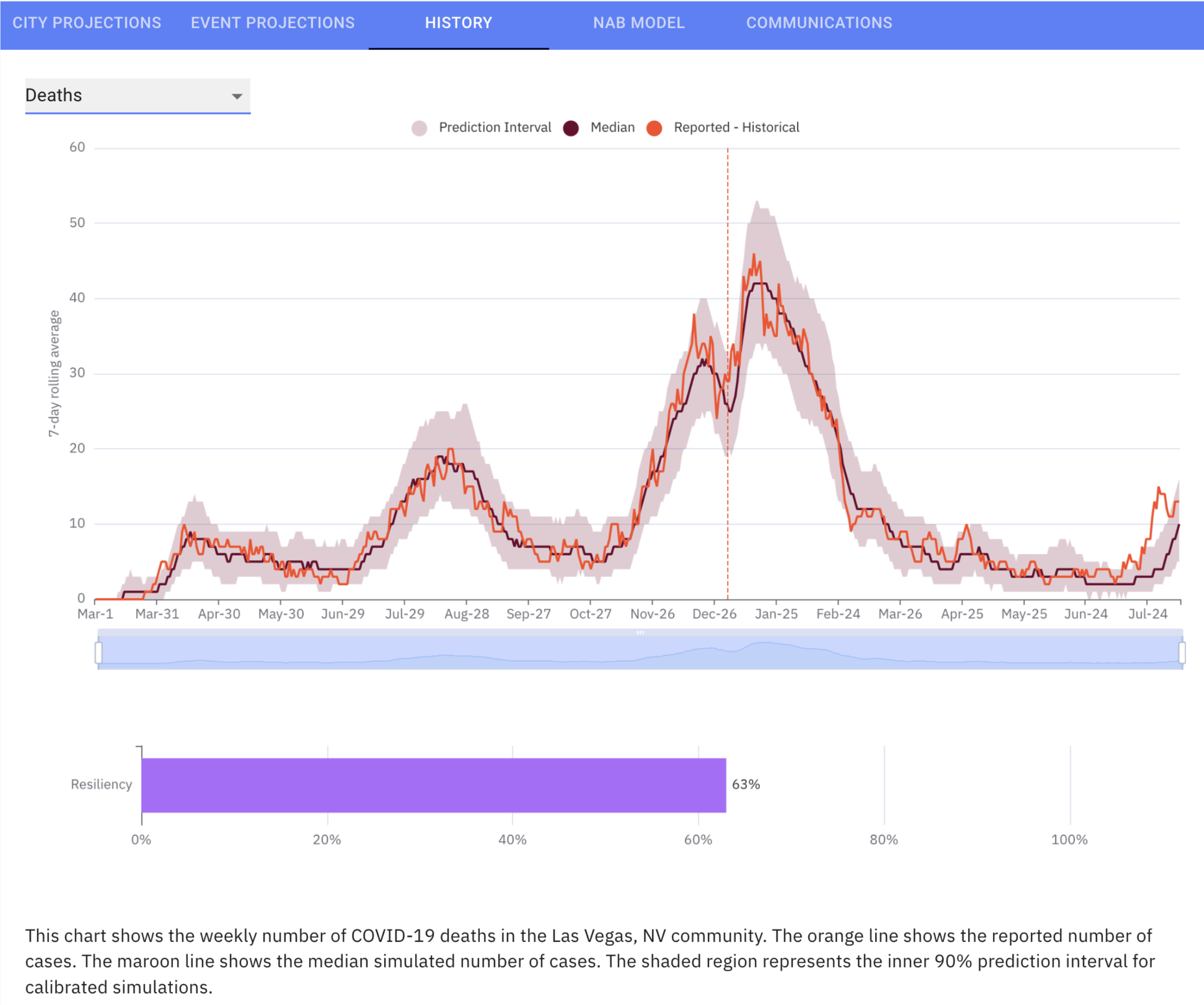
Cases will increase in nearly every city in the United States in November and December. Many people look at today's cases to make decisions about attendance for future events. Sharing data on the epidemic forecast can ease concerns for events scheduled Q1 and beyond.

Communicating expectations is the next challenge.

Exhibitors and attendees are familiar with vaccination or testing requirements for attendance at many events. Communicating when and why those requirements will not be required needs to be done months in advance.

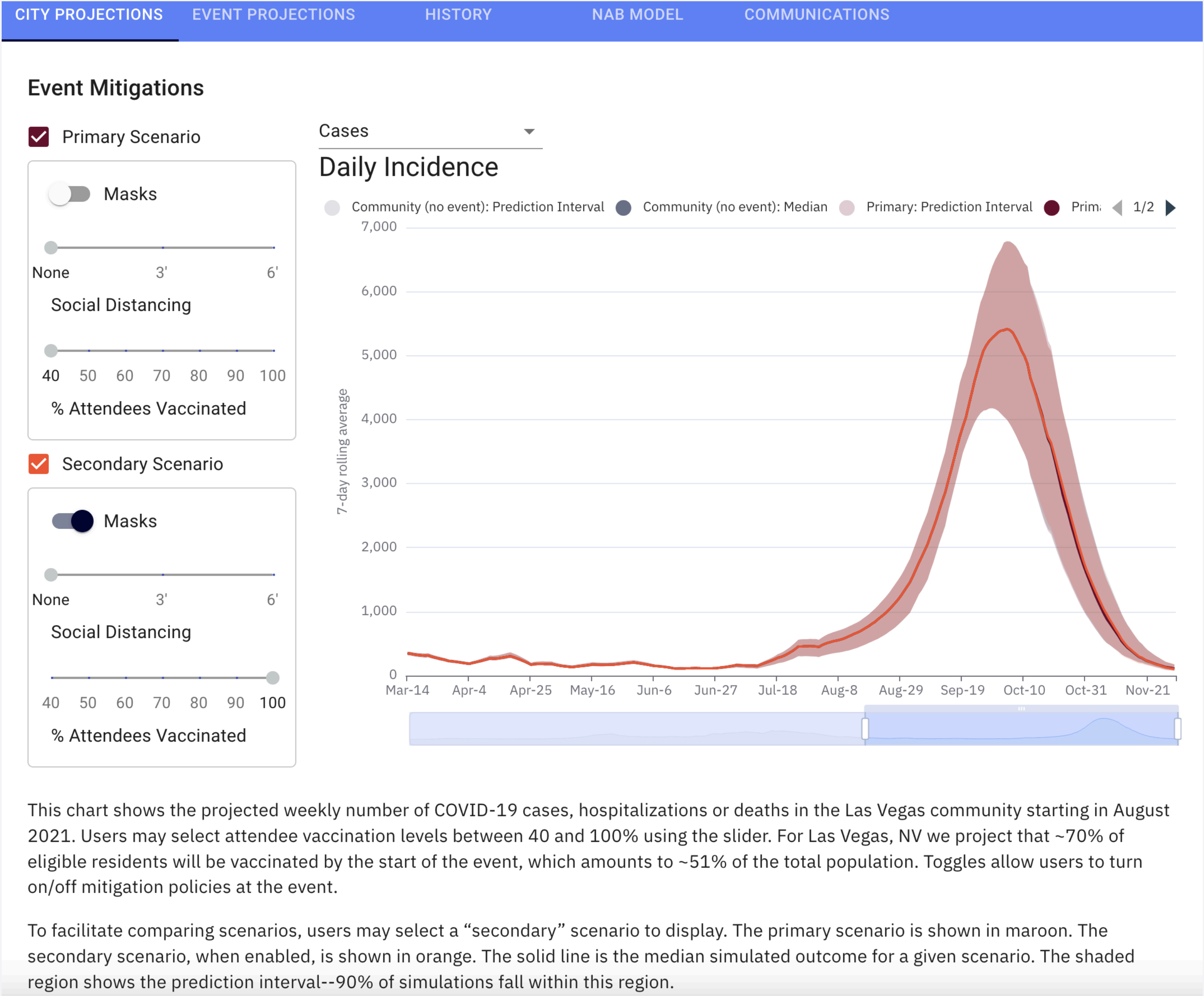
Decision Support Dashboard for Event Organizers

Enabling leaders to use data to support decisions, communicate more effectively, and provide assurance on safety measures.



Resiliency represents the amount of immunity within the given population at a given time.

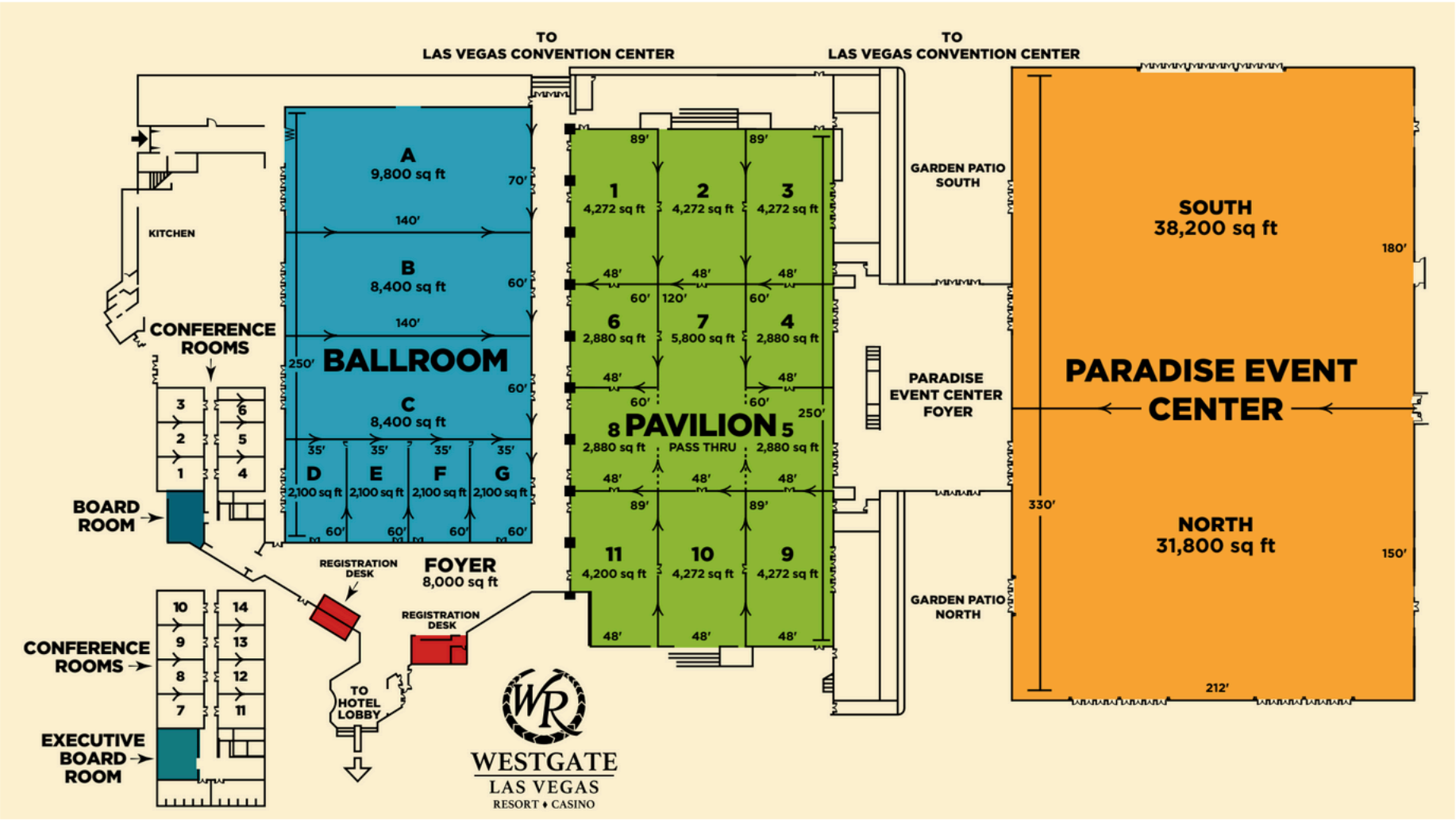
The History tab provides a full simulated history of the epidemic in the event city.
Each dashboard is calibrated to the specific location and event.



This tab shows COVID-19 cases specific to the NAB Show. The top chart displays cases prevented for each intervention. The "Baseline Event Scenario" is the scenario with 40% of attendees vaccinated (lower than expected), no masks, and no social distancing. Every increase in attendee vaccination will result in cases prevented. Users may select attendee vaccination levels between 40 and 100% using the slider. For Las Vegas, NV we project that ~70% of eligible residents will be vaccinated by the start of the event, which amounts to ~51% of the total population. Toggles allow users to turn on/off mitigation policies at the event. The table displays the total number of cases acquired at the event for each scenario with and without interventions. The primary and secondary scenarios that are selected at the top will appear highlighted in the table.

The Event Projections tab allows you to compare the cases prevented under primary and secondary mitigation scenarios

The model for the National Association of Broadcasters (NAB) Show for this work consists of event mixing locations including a large single event venue where attendees can interact, the North and Central Halls in the Las Vegas Convention Center and the Pavilion and Ballroom in the Westgate Resort. NAB attendees interact in these locations and with the local community in Las Vegas, Nevada. The schedules of attendees, described as agents in the model, are set according to data provided to Epistemix by NAB. This includes 50% of participant time spent in the Exhibit halls, with the remaining 50% of time spent in smaller subhalls. NAB requested that 5% of participants attend smaller meetings. Mixing locations carry a contact risk, the potential for viral transmission, based on the type of location and the hours spent in each location. The relative contact risk for NAB attendees is roughly similar to other agents in the model going about their regular daily activities. See below for more details on this model.



Event

During the event all attendees and exhibitors have 2 hours of opportunity to mix. This is representative of happy hours, dinner, mixers, keynote speakers, or other meetings that may occur in or near the event space.

Exhibit Halls

In the model, attendees spend 50-75% of their time in exhibit halls and subdivisions of large exhibit halls. Each day agents choose which exhibit hall they will attend and then spend 4 hours in a smaller subdivision hall and 2 hours exploring the rest of the exhibit hall. Larger exhibit halls (North and Central hall) will have more attendees spending time there each day. Contact rates in the exhibit hall are set to a calibrated workplace contact rate, based on typical influenza transmission in workplaces.

The Model tab explains the specific model’s design for your event and provides FAQs.

CITY PROJECTIONS

EVENT PROJECTIONS

HISTORY

NAB MODEL

COMMUNICATIONS

Your show is an important event, and we want to provide you with clear messages that provide assurance and confidence in the decisions and policies that will enable you to produce a safe event. The copy below can be used in any communications, press releases, or presentations for your stakeholders.

About Epistemix

Epistemix is built on decades of research on disease and population dynamics that builds solutions to understand epidemics. They have worked with the Exhibition & Conference Alliance and public health officials to develop a decision support model to help organizers plan events. Their software simulates everything from the impact of mask wearing, social distancing, and up-to-date levels of vaccination coverage at events, as well as vaccination coverage in the local area of the event and where attendees come from, so that show organizers and public health officials alike can plan to host events safely and with confidence.

The health and safety of attendees, exhibitors, team members, and communities is the highest priority for the industry as exhibitions, conferences, conventions, and trade shows return to hosting in-person events. Epistemix is doing their part by bringing data to decision makers and show organizers so they can take informed action on policies and protocols for their events.

About the Pandemic in the Fall of 2021

COVID-19 cases and hospitalizations will increase through 2021 and decline in 2022 before the United States will reach a management level of disease control. Similar to all countries in the Northern Hemisphere, most respiratory diseases in the United States have a seasonal spike in the fall and winter months. With the new SARS-CoV-2 variants, cases are likely to climb to higher numbers than last year if all mitigations are lifted, in part due to asymptomatic spread and mild infections. However, this does not mean that events have to shut down during these months; rather, organizers will need to uphold protocols that have been proven to decrease the risk of infection based on their demographics and the location of the show.

The Communications tab provides you with messaging suggestions for the results presented in the dashboard. We also provide templates for communicating with your board, exhibitors, and attendees.

Questions?

Please check out this [FAQ](#) page put together by Freeman.

If you'd like to set up a call to learn more - please reach out.
john.cordier@epistemix.com