

COVID-19 Visualizations of Interest to Actuaries

Background and Content

The COVID-19 pandemic has had a wide-ranging impact in areas of interest to practicing actuaries. Correlations exist between the pandemic and many topics varying across a range of practice areas. The SOA Catastrophe & Climate Strategic Research Program Steering Committee invites you to submit a visualization exploring the correlation between the COVID-19 pandemic and a theme of choice. The Committee will choose from submissions to form a cohesive story and then publish a coordinated work.

Areas of interest put forth by the committee are:

1. An item of the author's choosing that is in the traditional wheelhouse of practicing actuaries, of any practice area. (Author's Choice)
2. At-capacity hospital areas (e.g. NY earlier this year) and official Case Fatality Rate (CFR)
3. At the Country-level: GDP/capita vs CFR (comparing nations, or in-depth U.S.)
4. At the U.S. State-level: GDP/capita vs COVID-19 Testing/100,000
5. Mobility and Infection. This is a broad topic. Can be rates, cause/effect, correlations.
6. Unemployment rates. This can be static and quantitative or look at things like lockdown/mobility correlations with Unemployment.
7. Gini Index and Infections. How does the Gini wealth inequality index correlate with COVID-19 infection rates?
8. Looking at an R(squared) by Country: Deaths per 1000 or CFR vs Smoker prevalence, obesity or diabetes prevalence
9. Looking at 1-month case increases by state versus positive testing %. (is there more testing and/or more infections/spread?)
10. Looking at 1-month case increases by state (or country) versus Lockdown Index from Spring 2020. (e.g. Univ of Oxford Coronavirus Government Response Tracker for international, or other...)
11. Demographics: e.g. Over-65, the actual Case-Mix by State, Breakdowns in cases, recoveries, hospitalizations, deaths in areas of interest that we may not have seen.
12. Health insurance availability by state versus..., and correlations of interest
13. Compounding events which could spread the virus? Hurricane evacuations, heatwave sheltering, etc.

14. Long Term Care facilities, insurance coverages, demographics of insureds vs general population.

These are suggestions for inspiration and the approach to take and how to view the topic is up to the author.

Timeline

August 19, 2020: Call for essays issued

September 23, 2020: Deadline for submission of essays

October 15, 2020: Completion of review of essays and decisions on selection for publication

Length and Instructions for Submission

Visualizations must be submitted in English and be contained on less than one page. In order to publish a coordinated work, to be better able to weave the submissions together into a set of material, we require that the author provide us with a version that we can edit (adjust colors, fonts, etc.), where necessary, to enable the various visualizations to be presented in a consistent style. There is no requirement for formal or extensive footnoting, though caption and accompanying brief explanation may be appropriate.

Author information must be submitted with the visualization and include name; credentials or designations (if appropriate); title; organization/company; e-mail address; and phone number. Please provide all author information along with the submission.

Essays that contain any overt political statements, commercial content, and other inappropriate material will not be accepted. Articles must comply with the [SOA's antitrust guidelines](#).

Please submit your piece via e-mail by September 23, 2020 to:

Erika Schulty, Research Associate

Society of Actuaries

e-mail: ESchulty@soa.org

Awards

The review committee will select the leading visualizations and may elect to award prize money up to \$1,000. Consideration will be given to creativity, originality and the extent to which an idea could contribute to the further development of a coordinated series. In exchange for award money, selected authors will be required to assign all copyrights in their submissions to the Society of Actuaries.

Authors are ineligible for awards if a visualization is based on an SOA-sponsored and funded research study conducted by the author. However, authors are welcome to submit such visualizations for publication consideration.

Publication and Presentation

Depending on how many visualizations are received and the diversity among the topic areas, a suitable format for electronic publication and dissemination will be selected. If a cohesive story can be told, a subset may form the basis for a visualization to be presented at an SOA meeting, webcast, or other professional development event.

In addition, other venues for publication or presentation of the ideas outside of the SOA will be considered. It is hoped that publication of the collected coordinated visualization series will further knowledge and stimulate discussion as well as promote future efforts in this area.

Rights Granted

Please understand that by submitting a visualization for consideration, the visualization author(s) is granting to the Society of Actuaries an unlimited license to print or republish their visualization, with proper attribution given to the author.

Questions

Please direct any questions regarding this Call for Submissions to:

Rob Montgomery, SOA Research Project Manager

Society of Actuaries

e-mail: rmontgomery@soa.org