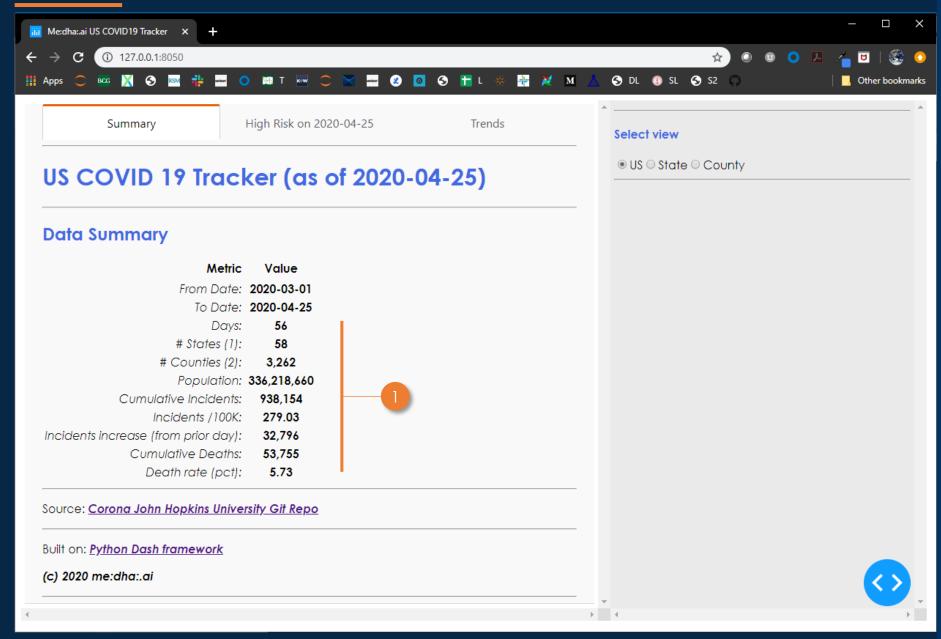
US COVID Tracker - 04/26/2020

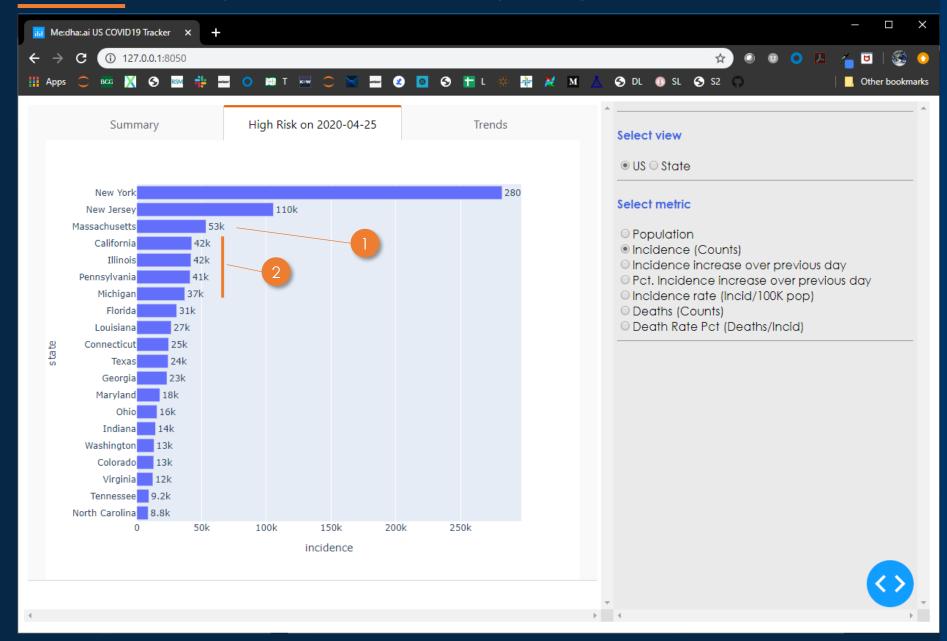
me:dha:.ai

Summary



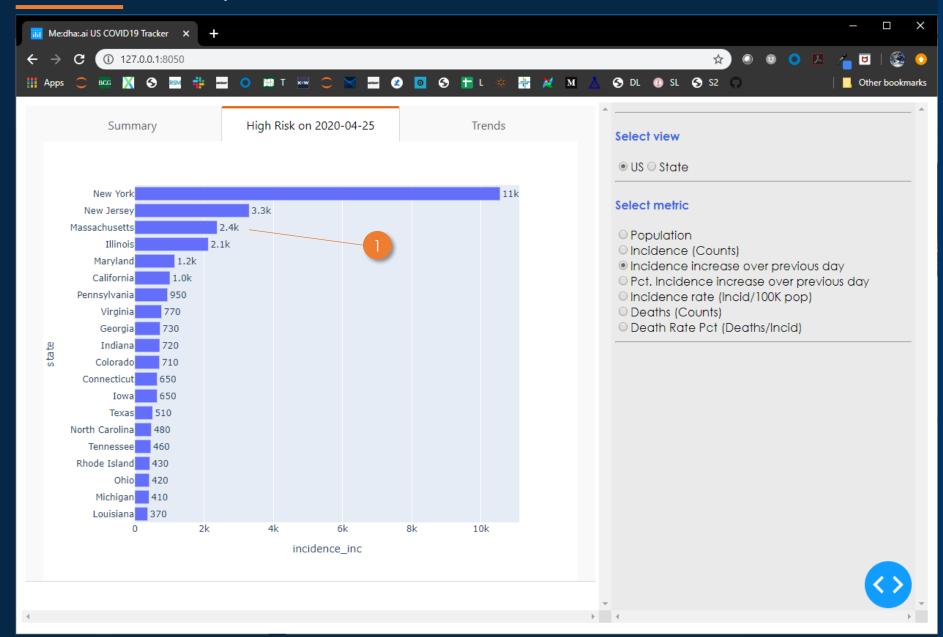
 In ~2 months (56 days) into the pandemic, US has close to 1M COVID19 incidences and ~54 K deaths

Cumulative high incidence states (04/25)



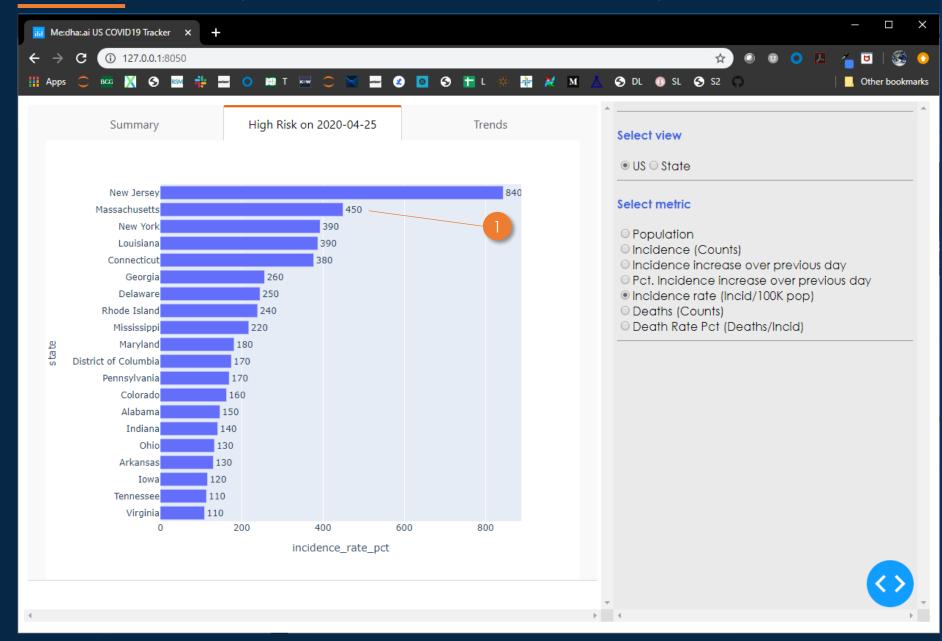
- 1. The state of mass is #3 from an incidence count
- 2. The sates of California,
 Illinois, Pennsylvania and
 Michigan are next highest
 in terms of incidence rates

Incidence daily increase from 04/24



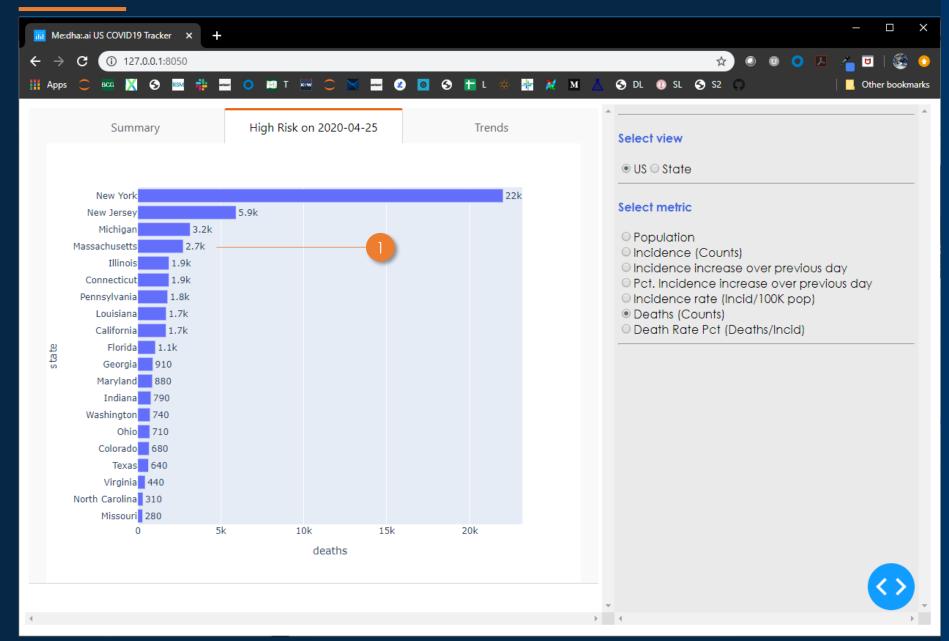
The incidence daily increase in state of Mass is still high

Incidence rate (incidences / 100 K population) from 04/24



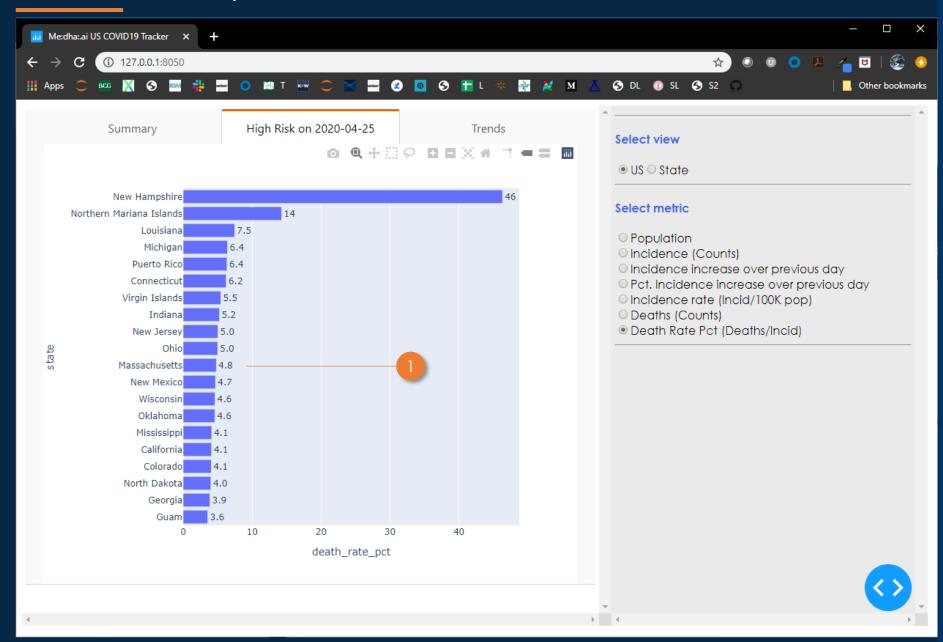
1. Even from an incidence rate perspective, the state of Mass ranks very high

Cumulative deaths 04/25



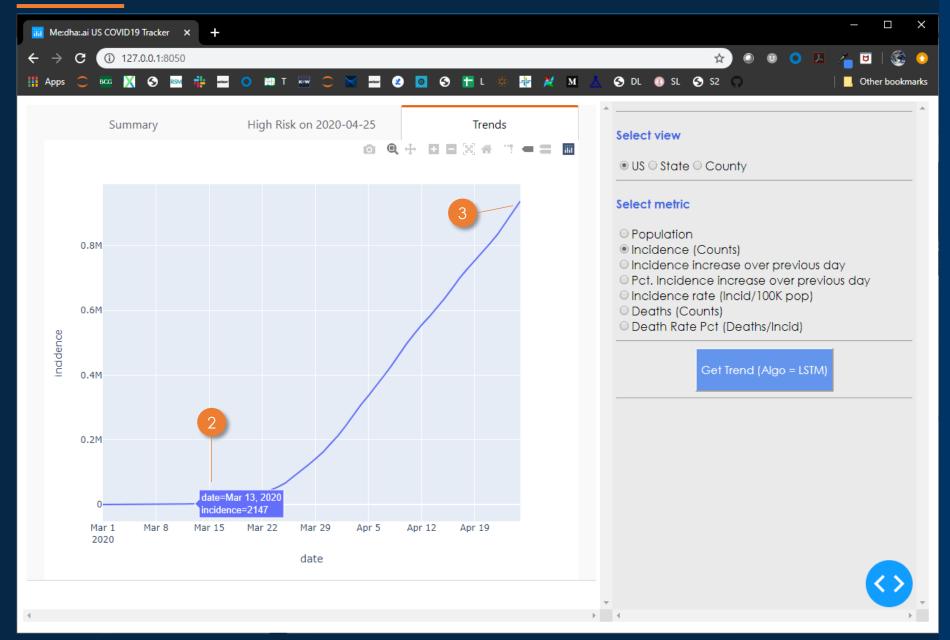
1. Deaths in the state of Mass are high

Death rate - 04/25



1. Death rate in Mass is relatively lower

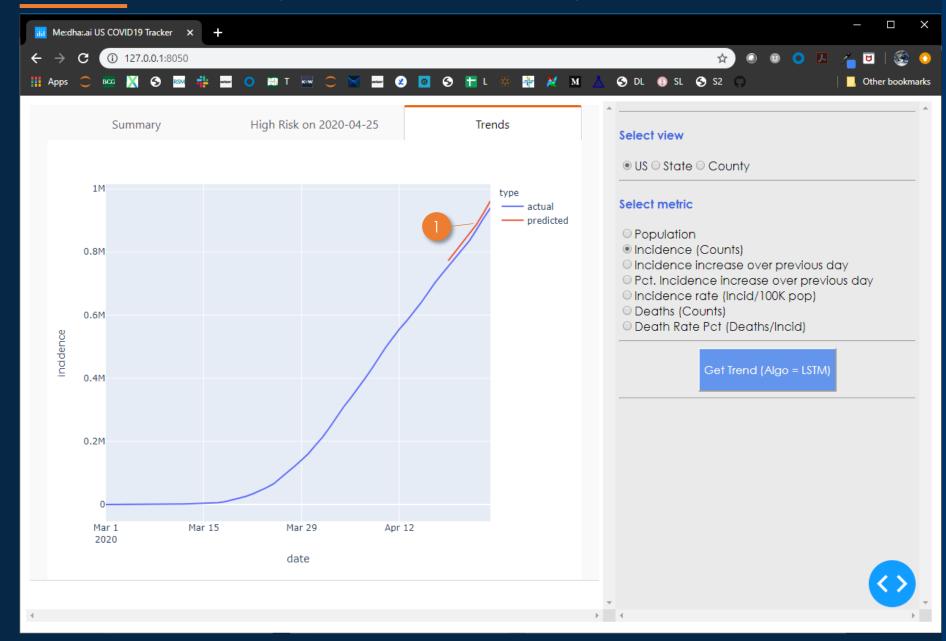
Incidence counts nation-wide



- National emergency was declared on 03/13
- 2. Nation wide stats (03/13)
 - Incidence = 2 K
 - Deaths = 53
 - Death rate = 0.14%
 - Days = 0
 - CDGR = 0
- 3. Nation wide stats (04/25)
 - Incidence = 938 K
 - Deaths = 54 K
 - Death rate = 5.73%
 - <u>Days</u> = 43
 - CDGR = 15.3%

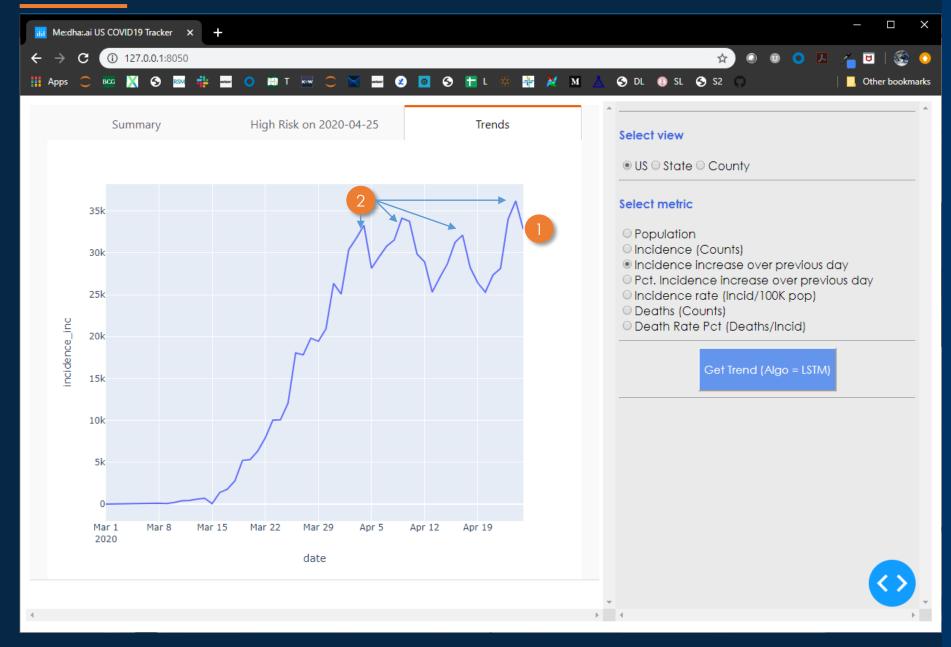
CDGR = Cumulative Daily Growth Rate = 16.6 % or doubling in incidence in roughly 4.7 days

Incidence counts (actuals vs. predicted) nation-wide



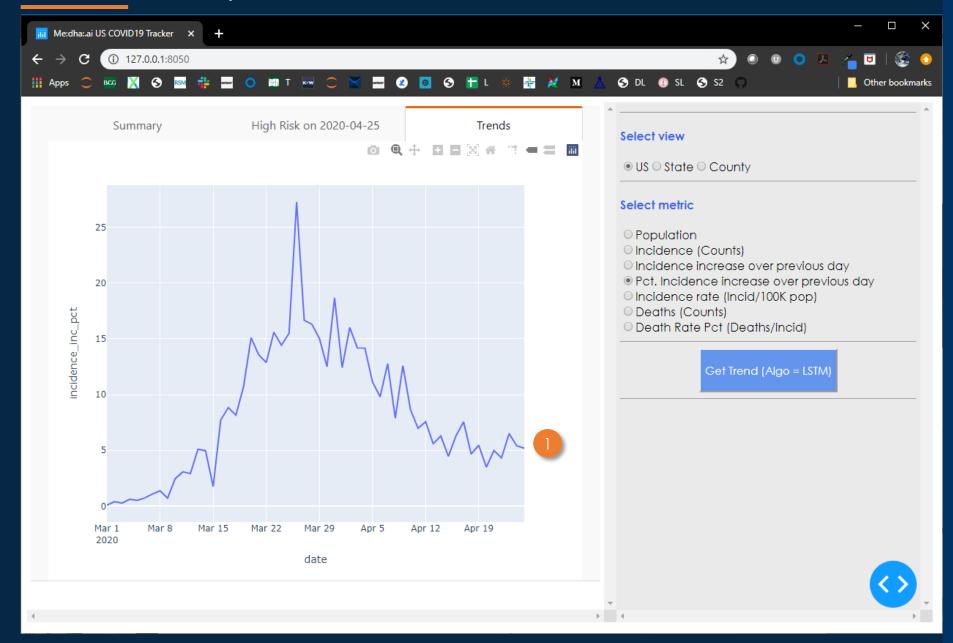
 From a nation-wide perspective, incidence spread hasn't peaked yet

Incidence daily increase – nation-wide



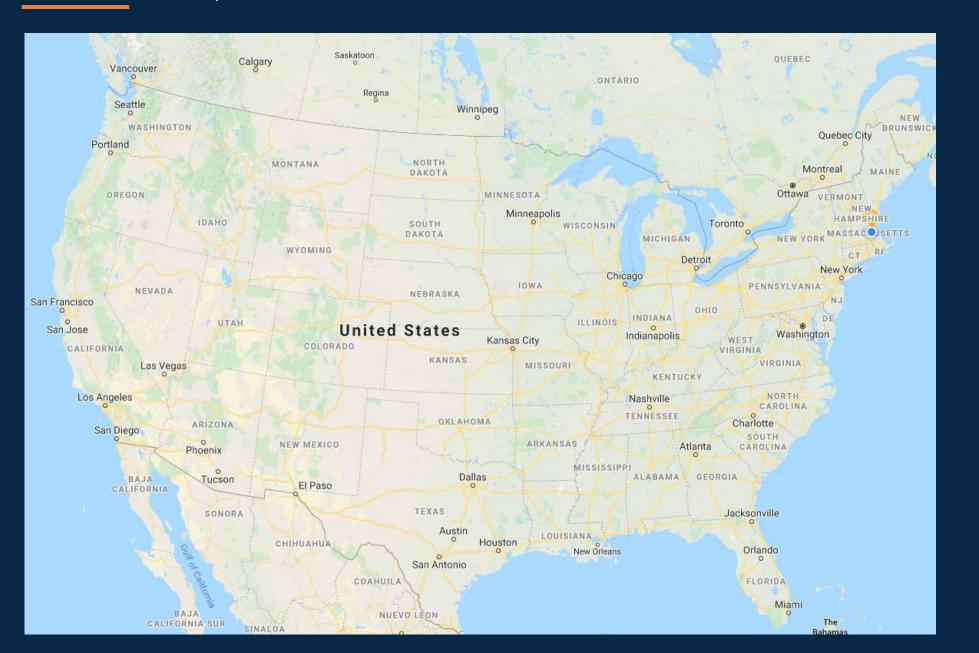
- From a nation-wide perspective, incidence count is still on the rise, albeit steadily
- 2. The peaks are showing weekly seasonality and correspond to weekends either stats are updated each weekend or households are making milk runs over the weekend

Incidence daily increase – nation-wide

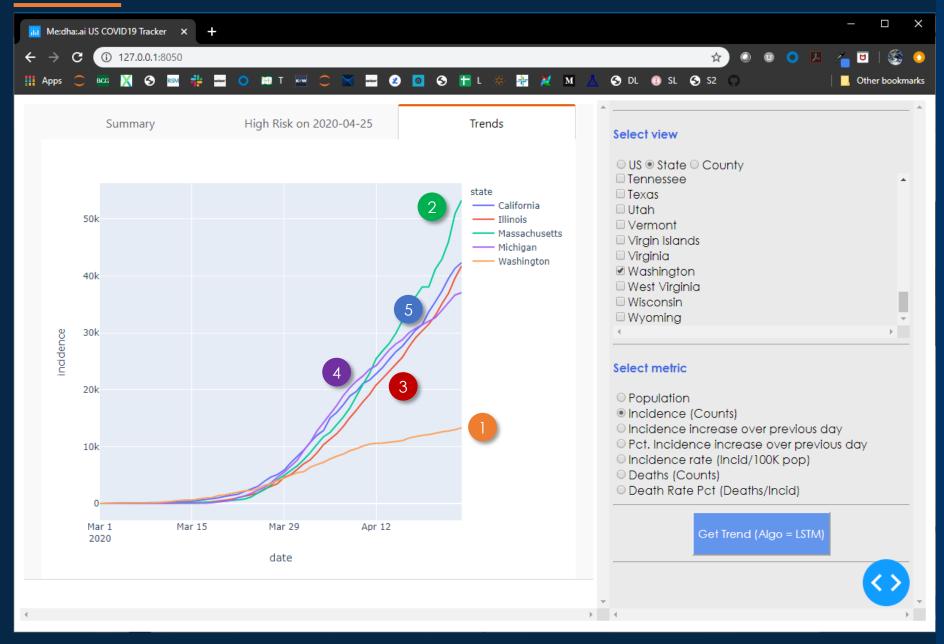


1. While the rate of increase is decreasing, since the prior base is high, the incidence is still spreading at a faster clip

Breakdown by states

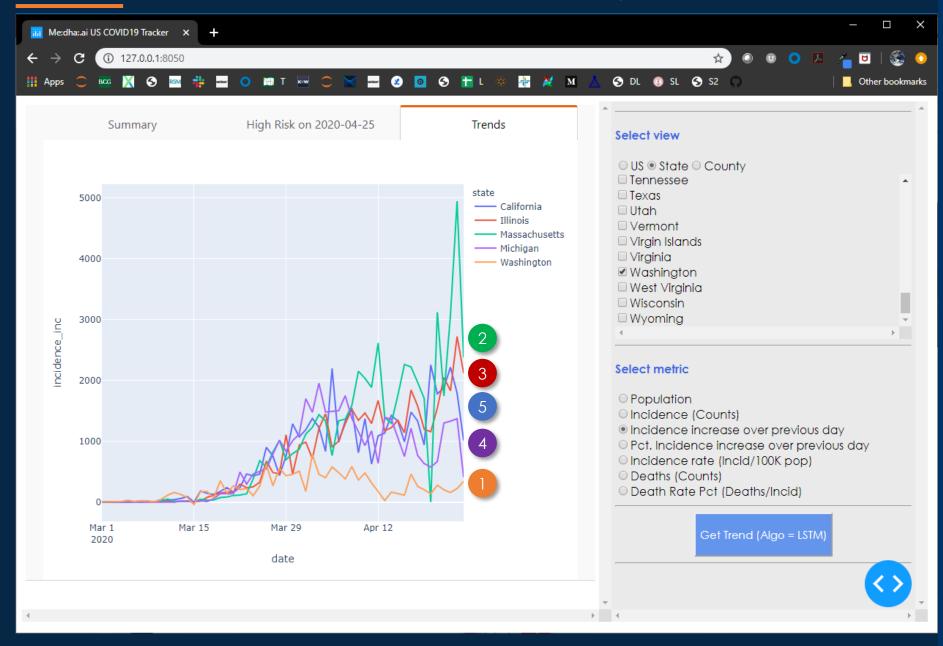


Incidence count break-down by high-risk states



- Washington state shows most promise – cumulative case count is almost steady
- 2. The incidence spread in mass is still on the rise, showing limited signs of abatement
- 3. Illinois is showing similar trends as that of Mass'
- 4. Michigan seems to be showing signs of peak
- 5. California seems to be showing some resurgence

Incidence daily increase break-down by high-risk states

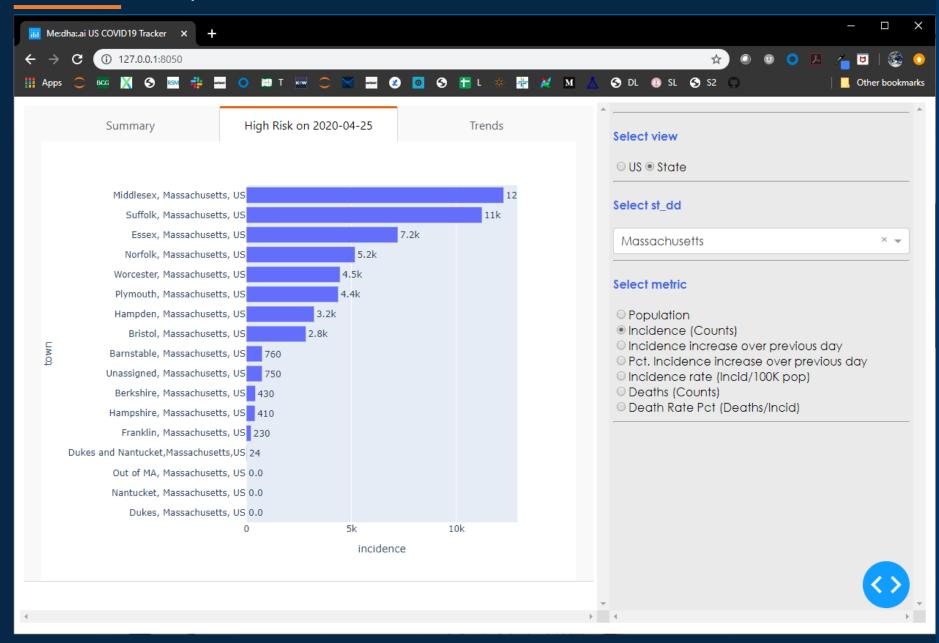


- Washington state shows most promise – increase is more-or-less in check
- In Mass, the incidence increase is still on a faster clip
- Illinois is showing similar trends as that of Mass'
- 4. Michigan seems to be showing signs of peak
- 5. California seems to be showing some resurgence

Counties in Massachusetts

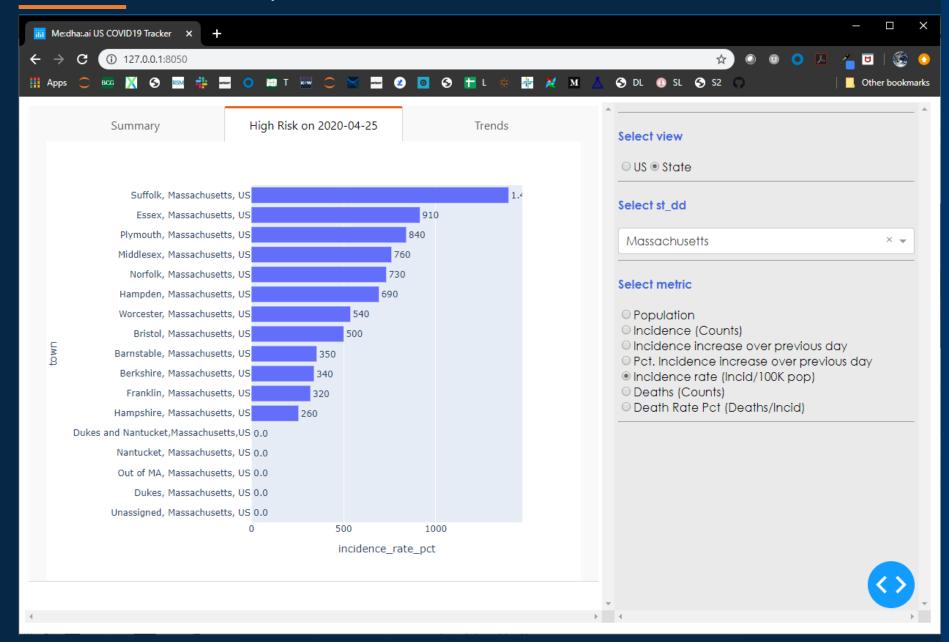


Incidence by counties in Massachusetts



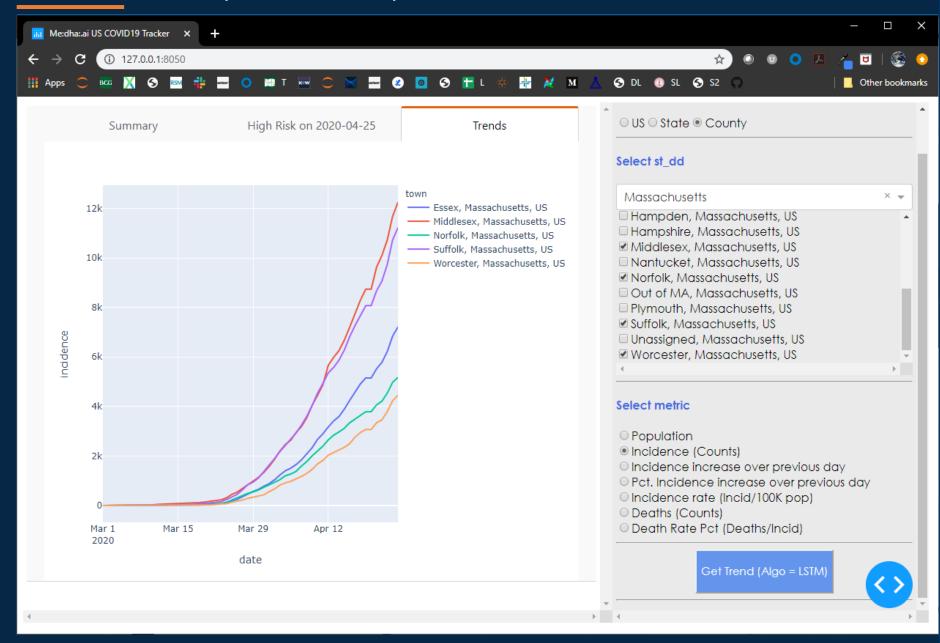
 Counties at most risk -Middlesex, Suffolk, Essex, Norfolk and Worcester

Incidence rates by counties in Massachusetts



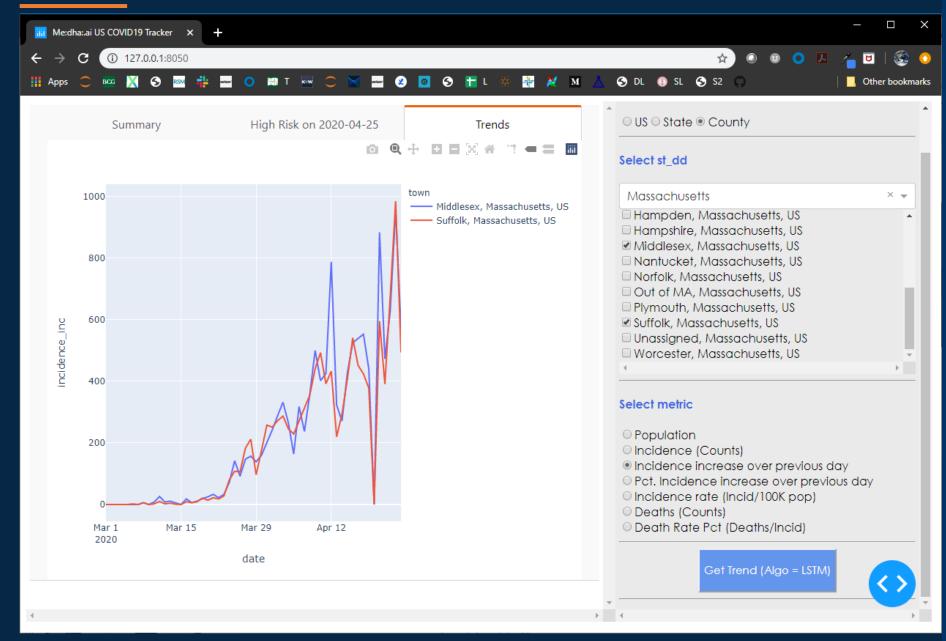
 Densely populated counties (Suffolk & Essex) have the highest incidence rates

Incidence daily increase by counties in Massachusetts



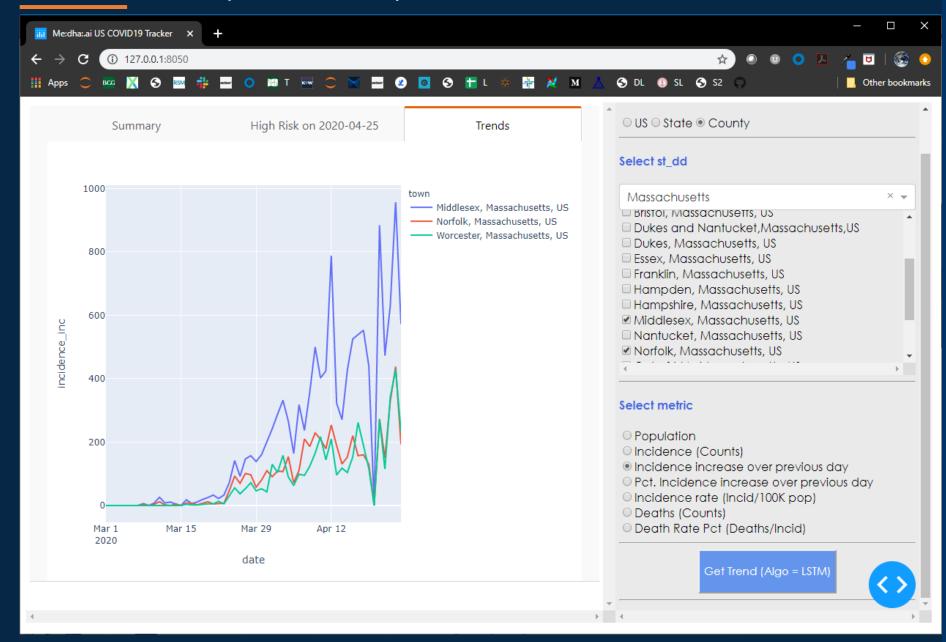
 Counties at most risk -Middlesex, Suffolk, Essex, Norfolk and Worcester

Incidence daily increase by select counties in Massachusetts



 Incidence increases are similar in Middlesex & in Suffolk counties

Incidence daily increase by select counties in Massachusetts



 Incidence increases in Norfolk and Worcester counties are very similar, albeit at a much slower clip than that in Middlesex and Suffolk counties