

# IS201 Lecture Notes – Session 19

## Tableau Forecasts, Excel Solver

Brandt Redd – 2020-03-18

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### Setup

- Pause and then restart the recording.
- Open chat and participants windows.

### Tableau Analysis of COVID-19 Data

COVID-19 Data: <https://brandtredd.org/files/IS201/COVID-19-data>

Johns Hopkins Visualizations:

<https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Tableau COVID-19 Page: <https://www.tableau.com/covid-19-coronavirus-data-resources>

### Show US Data

- New Tableau Tab
- Date to Columns
- Change to Daily
- Confirmed to Rows
- Country/Region to Filters
- Filter to US

### Forecast

- Click on Analytics Tab (Upper Left)
- Select Forecast and drag onto the graph
- To customize: Right click on graph (in the view) – Forecast Options
  - Change interval to three months.
- This is a generic forecasting model. There are epidemiological models that do a much better job.

### Using Excel

- Load COVID-19
- Filter by Country – US
- Date to Rows
- Confirmed to Columns
- Deaths to Columns
- Right-click one date
- Select Group and select date
- Create the graph

### Enable Solver and Data Analysis

- File-Options-Add-Ins
- Manage Excel Add-Ins – Go
- Enable Solver and Data Analysis

## Solver in Excel

- Load TP-R-Us
- Invoke the Solver
- Maximize \$C\$12
- By Changing \$C\$15
- Constraint: \$C\$15 <= \$C\$20
- Experiment with different cost models

## If Time – Return to Tableau For More Analytics

### Symbol Map

- Province/State to Columns
- Confirmed to Rows
- Country/Region to Filters
  - Filter to just US
- Show Me – Symbol Map
- Also try switching to Filled Map

### Highlighted Table

- Country/Region to Rows
- Confirmed to Columns
- Switch to Highlight Table
- Hover to right of Country/Region and sort by Confirmed
- Click Color – Quick Calculation – Rank
- Change Sort to Alphabetic
- Click Color – Edit Colors – Reversed to make highest rank the darkest

### Side-By-Side Chart

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