PROJECT 4

Build Data Dashboards
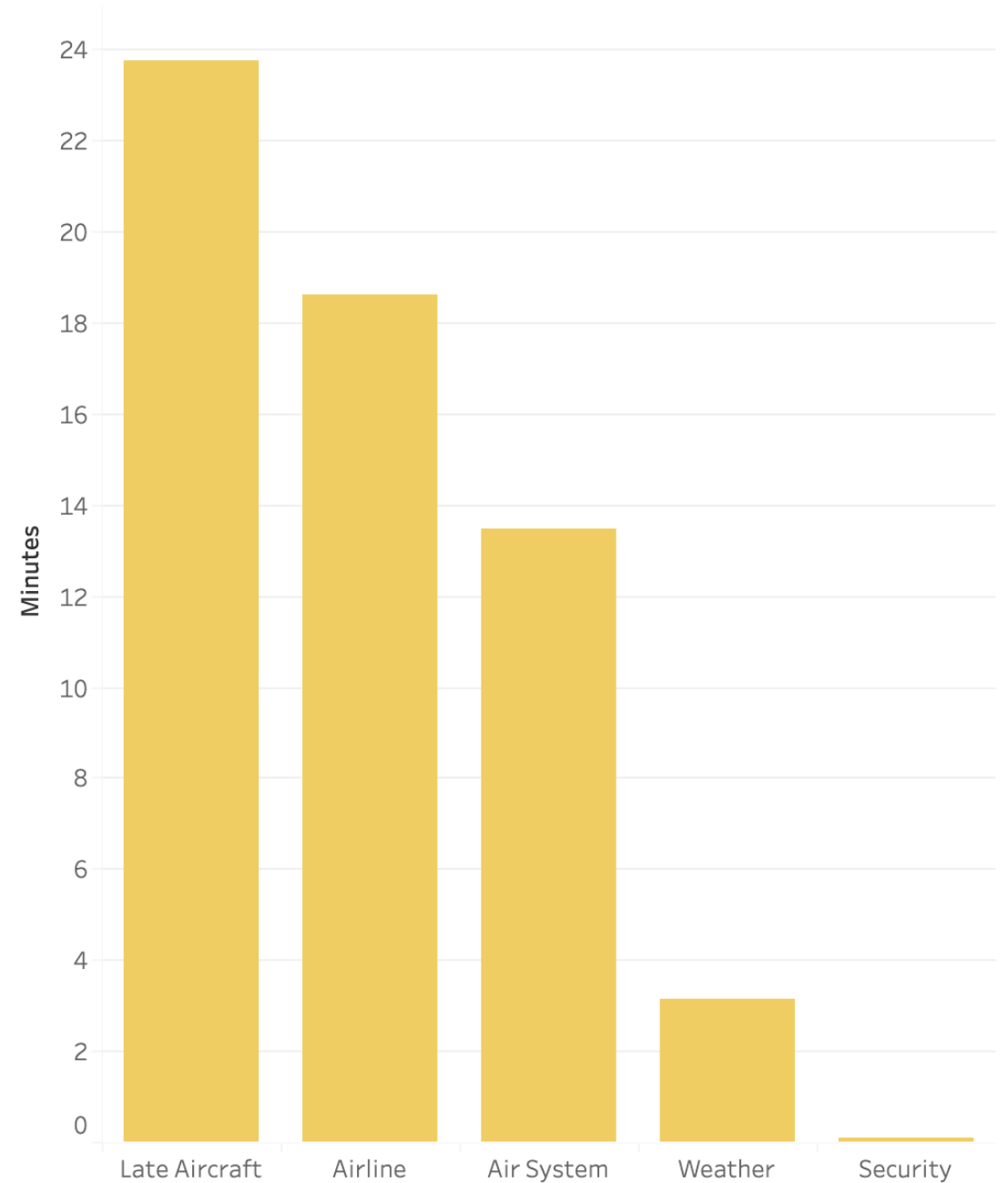
Marketing Analytics Nanodegree

By: Siouxsie J. Waller

Summary: In 2015, the main reason for delayed flights for all airlines in the U.S. was late aircraft. Average delay time for late aircraft was 24 minutes.
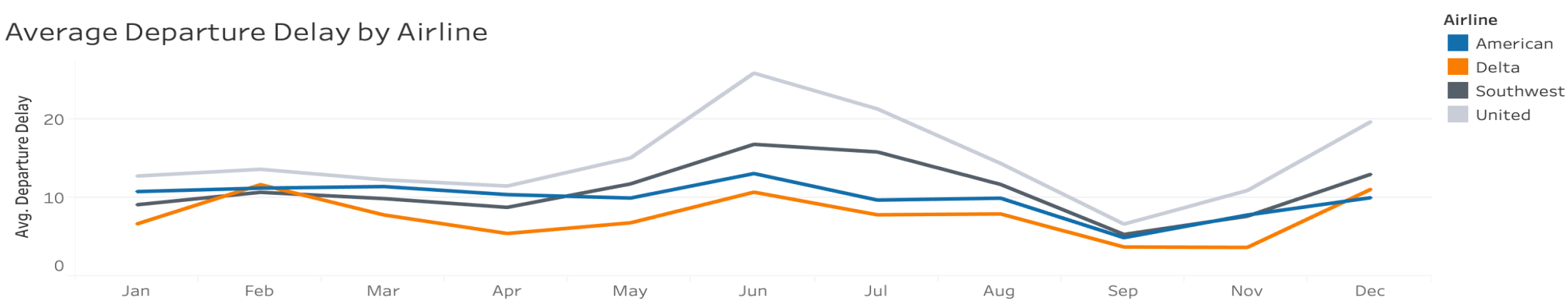
Design Choice: Simplicity is best in this instance, so I chose a bar chart. I changed the labels on the axis and widened the chart to be more pleasing to the eye.

Link to Viz: https://public.tableau.com/profile/siouxsie.jw#!/vizhome/Proj4Flight-DelayReasons/ReasonsforDelay?publish=yes
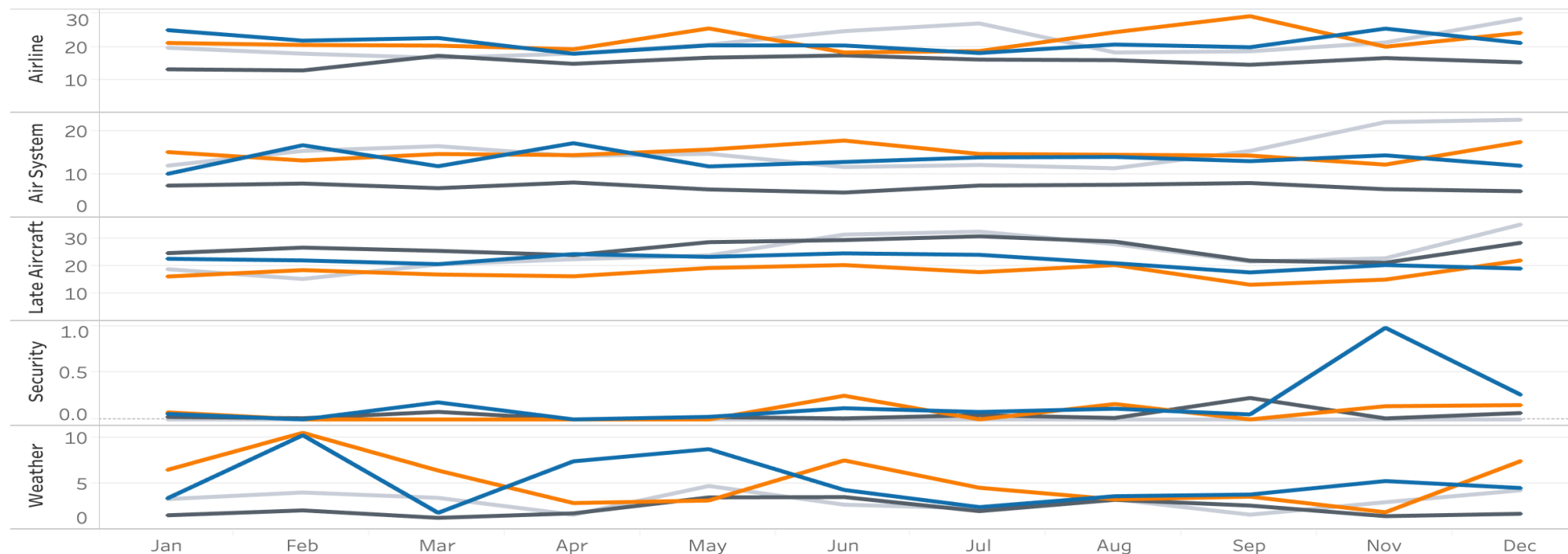
Causes of Delay - All Domestic Airlines

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Average Departure Delay by Airline

Airline
- American
- Delta
- Southwest
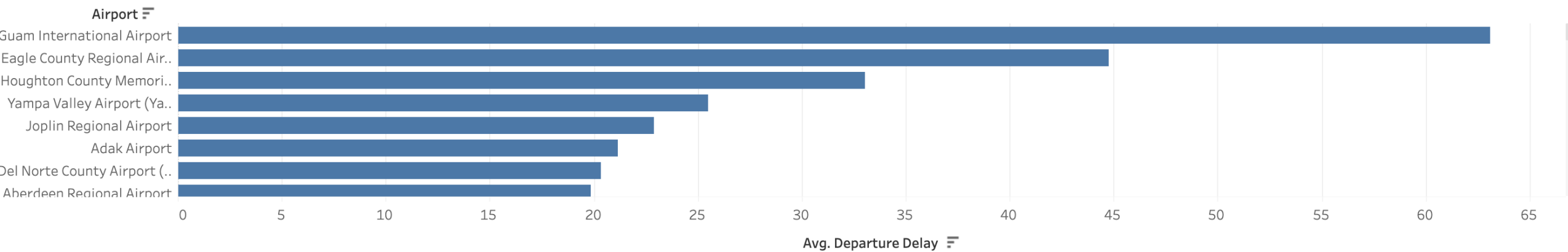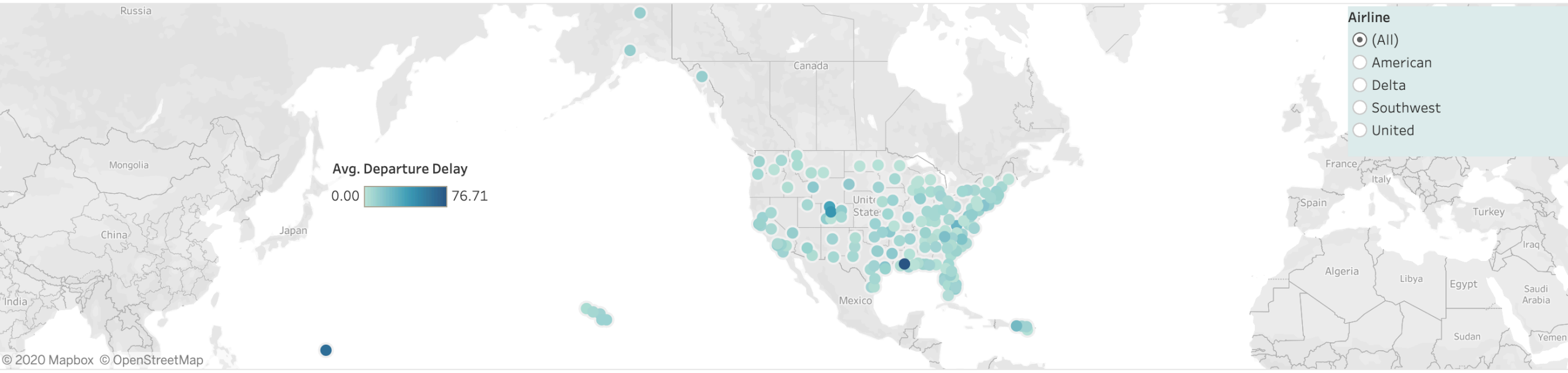- United

Causes of Delay

Summary: For the 4 major airlines, we can see that June was the highest month overall for delays. 3 out of 4 major airlines had their spike in June, with United being the highest at 25.92. Delta has the lowest
                 overall delays in all categories. United is the highest, due to spikes in June and December.

Design Choice: I felt the line chart was the simplest way to view this information. I first used a simple one to display the overall delay, and then drilled down to be more specific with the delay reason. I used color to differentiate
                 the airlines shown in the legend.

Link to Dashboard: https://public.tableau.com/profile/siouxsie.jw#!/vizhome/Avg_DelayandCauses/Dashboard1?publish=yes

Avg. Departure Delays by Airport

Airline
- (All)
- American
- Delta
- Southwest
- United

Avg. Departure Delay
0.00 — 76.71

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Airport

Airport	
Guam International Airport	
Eagle County Regional Air..	
Houghton County Memori..	
Yampa Valley Airport (Ya..	
Joplin Regional Airport	
Adak Airport	
Del Norte County Airport (..	
Aberdeen Regional Airport	

Avg. Departure Delay

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Summary: By zooming into the map, we can see that Colorado, Louisiana and Guam have the highest average departure delays for the 4 major airlines.

Design Choice: A bar chart, in addition to a map, was provided below for two ways to visualize the same information. I have removed Airports with less than a 0 average departure delay for less clutter, and listed the 4 major airlines from the previous slide in the legend. I moved the 'avg departure delay' legend in closer to focus the visual.

Link to Viz: https://public.tableau.com/profile/siouxsie.jw#!/vizhome/DepartureDelaysbyAirport_15930406389730/Dashboard2?publish=yes

Resources:

Google, Tableau community and e-learning (https://elearning.tableau.com/desktop-i-fundamentals),
YouTube, and clicking around Tableau to figure out problems on my own.