U UDACITY

Business Analyst Nanodegree
Project 6 – Build Data Dashboards

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Insight 1

Dashboard URL - https://public.tableau.com/profile/hari.nair2737#!/vizhome/Insight1-Project6-HariSankaranNair/FlightCancellations

Summary – Dashboard showing the distribution of the number of cancellations across the states from where flights originated and the cancellation percentage (out of total flights) for each of the flight originating states, which can be filtered by day of the week.

Insight
From the dashboard, we can see the origin states with the highest number of flight cancellations both in absolute numbers as well as a percentage of the total flights. We can see that California (with 33,513) and Texas (with 32,412) lead in the absolute number of cancellations. But if we examine the percentage of cancelled flights as a proportion of total flights in each state, Vermont leads the table at 4.6%. This is despite it being the second-lowest in the absolute number of cancellations (152). Distribution by cancellation percentage changes by day of the week, with different states leading.

Insight 2

Dashboard URL - https://public.tableau.com/profile/hari.nair2737#!/vizhome/Insight2-Project6-HariSankaranNair/CancellationReasonsInsight

Summary – Treemap chart showing the reasons for flight cancellations which are filtered by the state of origin and day of the week

Insight
From the story tab, we can see the reasons for flight cancellations across the USA, which also dives into the states of California and Texas (the states with the highest number of cancellations). Across all the states, Weather is the primary cause for cancellations (at 54.07%) with Airline/Carrier (28.42%) at second and National Air System (17.51%) at third.

If we drill down to the states with top cancellations – In California, Airline/Carrier was the major reason at 51.58% and Weather coming in at 33.58%. On the other hand, in Texas, weather causes more cancellations than the national average (62.78%) and National Air System accounts only for a small part (7.87%)

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Insight 3

Dashboard URL - https://public.tableau.com/profile/hari.nair2737#!/vizhome/Insight3-Project6-HariSankaranNair/DepartureDelayStory

Summary – Heatmap showing the average departure delay across the time of day and day of the week

Insight
From the heatmap, we can see how the average departure delay varies across the time of day and day of the week. This can be filtered for the Origin Airport.

Across all airports, 12 am-4 am is the time when delays are the longest on average. Interestingly, while delays occur at all other times, from 4 am-8 am, flights appear to be taking off ahead of schedule. Deep diving into two of the largest airports – JFK mostly mirrors the national trend, though there are variations across the days of the week. Chicago O'Hare shows a slightly different trend with significant delays from 12 am-4 am but lower ones for all other times on all days.