

Ross DataThon

JetBlue Delay Case

James Tang, Zeyuan Li, Shuyan Li, Gwynyth Phang
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Delay Cost Huge in US



“Continental lose \$6 million per month in delays, overturn the tide by diverting 3 million to incentivize employees”

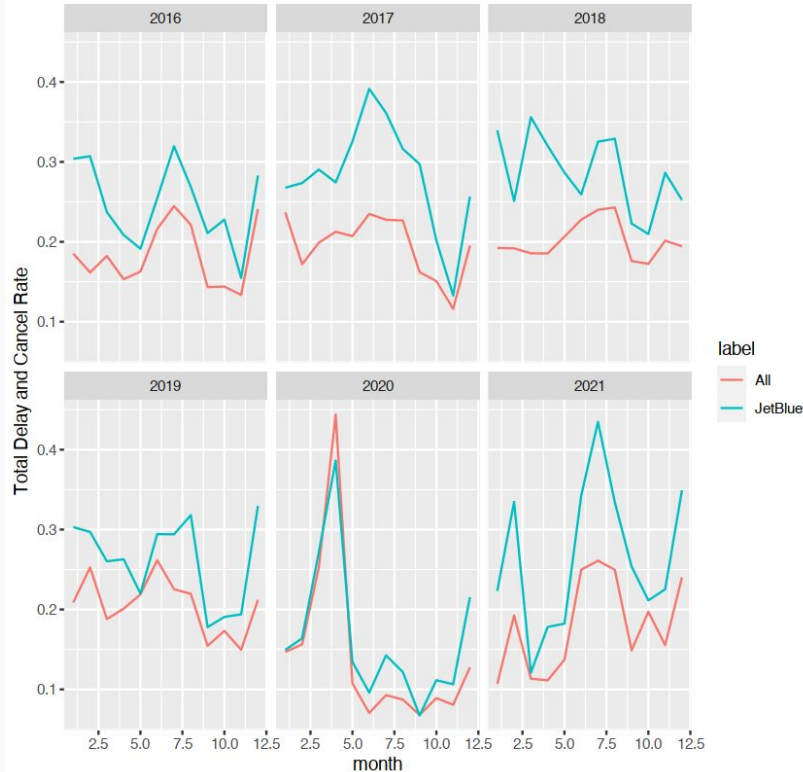
— Gordon Bethune CEO of Continental Airlines



Source: CNBC

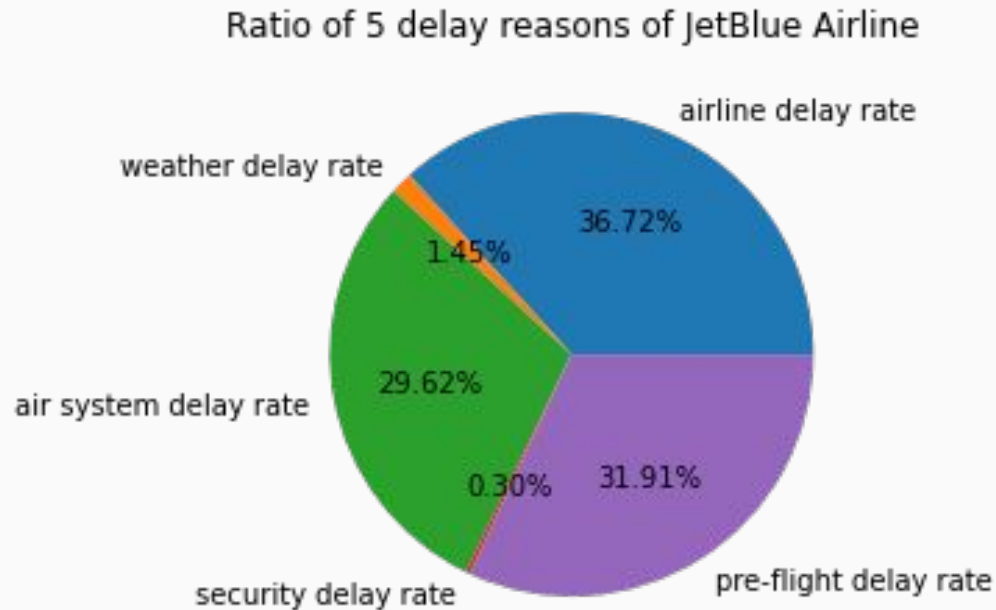
JetBlue Delay performance

Total Delay and cancel Rate in 12 Months (JetBlue v.s. All)



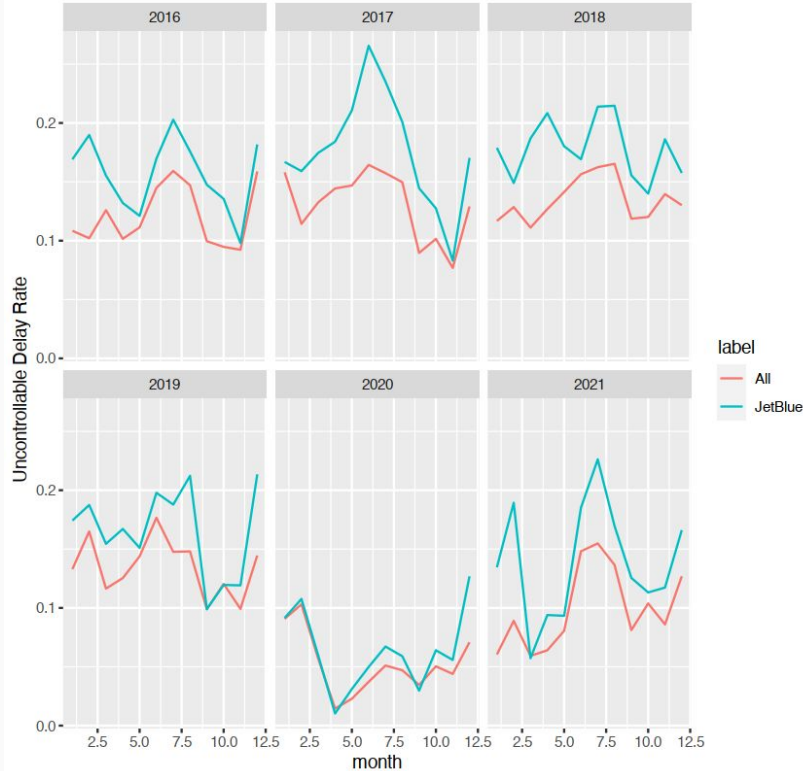
- On JetBlue
 - Throughout 6 years
 - JetBlue performs worse than the rest of the industry
 - It becomes better during COVID (sample is small during that time)
- On Industry
 - The industry will see
 - Drop in Feb and September
 - Spike from May to August (travel season)
 - Spike in Thanksgiving Holiday season
 - Spike can be attributed to weather and congestion

Delay reason breakdown

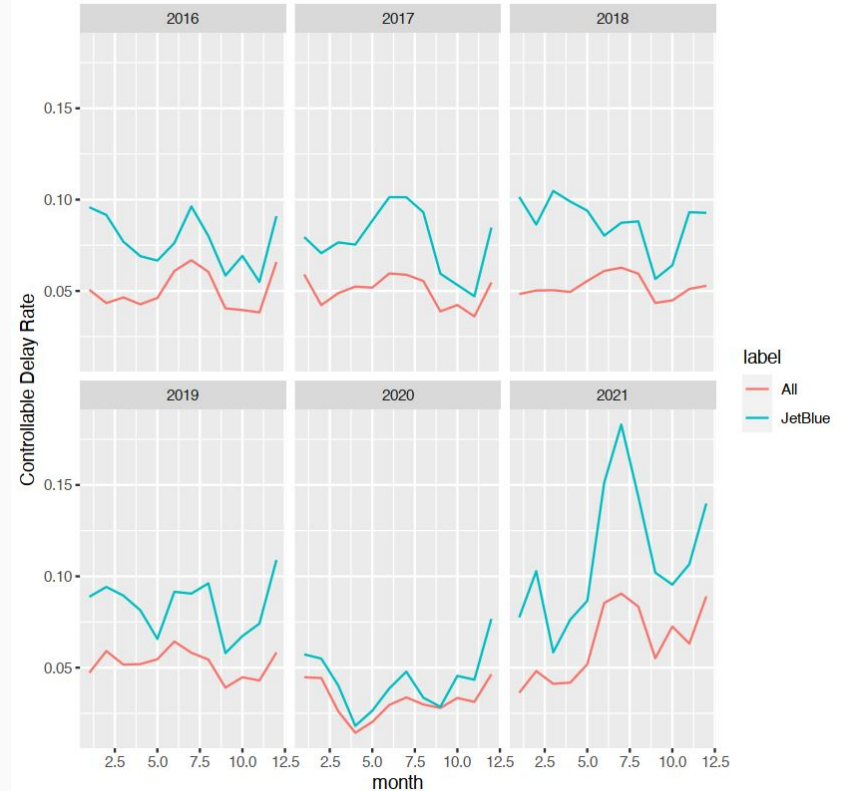


Delay reason Breakdown

Uncontrollable Delay Rate in 12 Months (JetBlue v.s. All)



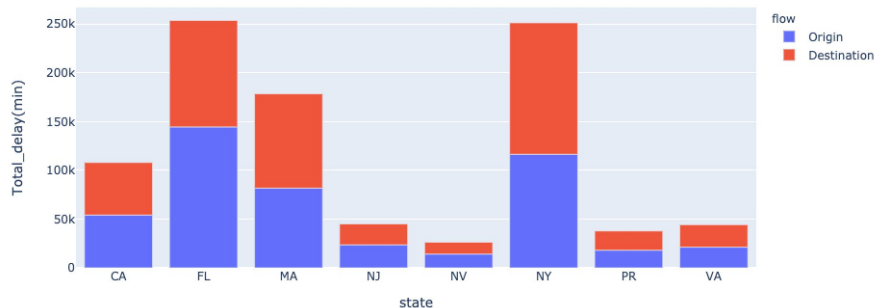
Controllable Delay Rate in 12 Months (JetBlue v.s. All)



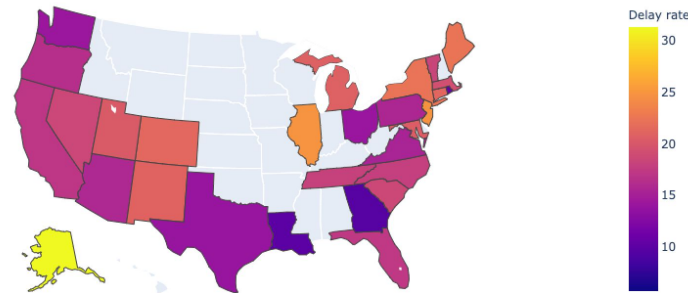
JetBlue State level breakdown



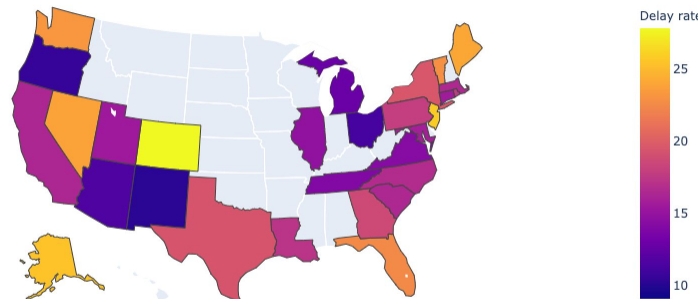
JetBlue 2017 State-wide Delay Time (min)



2017 JetBlue Average Delay per Flight (min/ flight) Destination State Map



2017 JetBlue Average Delay per Flight (min/ flight) Origin State Map



Solution 1 Cut Schedule

- Examine high delay ratio in major states and major seasons
- Prioritize reducing cash negative routes
- Enhance customer experience and loyalty without many delays

“I want JetBlue to become a customer service company that provide flights” — David Neeleman



Not convincing?

NEWS

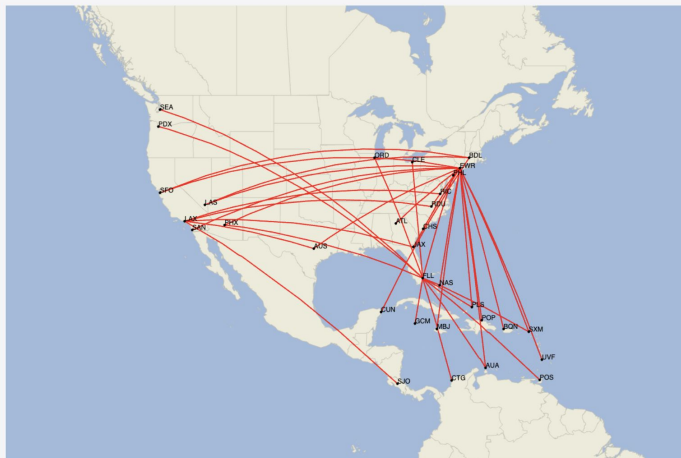
JetBlue removes 37 routes with big cuts hitting NYC and South Florida

Zach Griff

Aug. 14, 2022 • 6 min read

- That's exactly what they did on Apr 2022
- Cut schedule due to demand downturn, on those two states
- Lack of data at hand, we couldn't verify

The full list of cuts is at the bottom of this story, but the two airports hit hardest are Fort Lauderdale (FLL) and Newark (EWR).

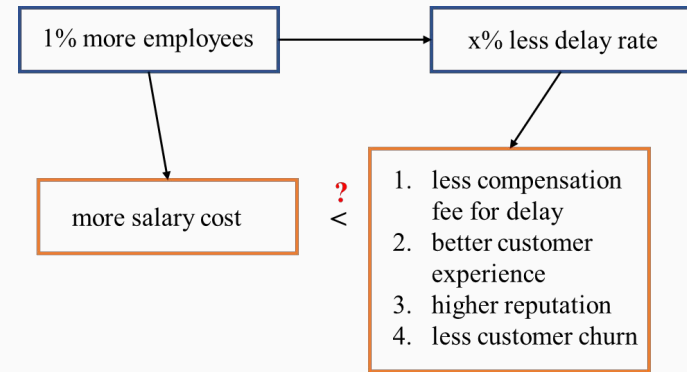


(Map courtesy of Cirium)

The former is one of the airline's biggest focus cities and has been [especially resilient during the demand downturn](#) associated with the pandemic.

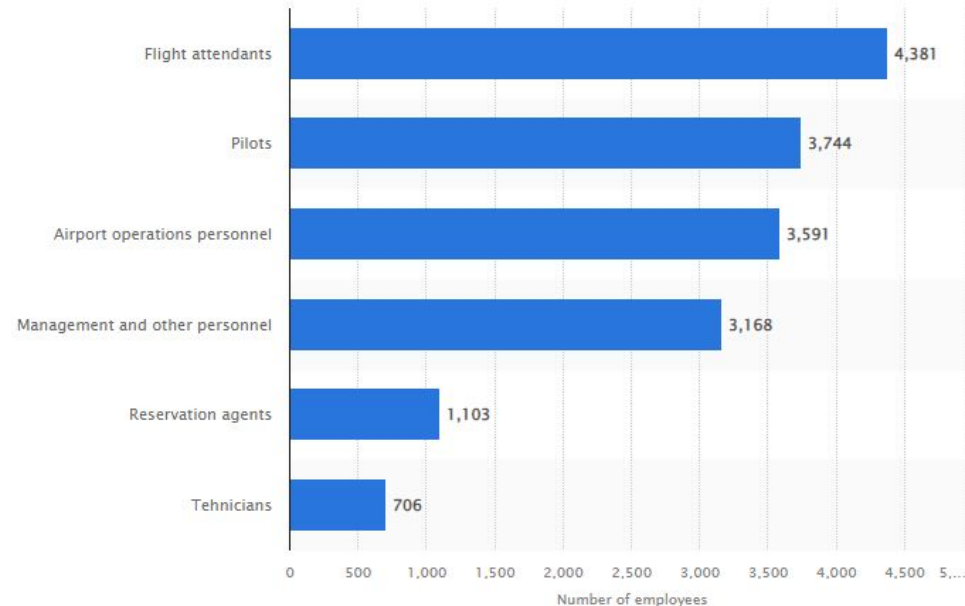
Solution 2 Increase bonus

- Cost & Benefit analysis
- Calculate breakeven target rate
- Continental targeted at rising to 5th on the arrival rate from the last
- Currently number 10 with 74% on-time
- What percentage should JetBlue targeting at



Cost (left side)

salary cost = hourly salary * 8 hours per day * 30 days * 1% * origin employees



Flight attendant: 41,500
 Mechanics operational staff: 64,809
 Technician: 791,630

Benefit (right side)

reduced compensation fee = seats per aircraft * loadfactor * compensation fee per person* flights per month * x%

Monthly Compensation Avoided = Fee to Passenger * x%

= # of passengers* fee per person * x%

Because # of passengers = load factor * seats per airplane

- Load factor: 84%
- Seats: 200
- fee two ways to calculate

General approach: Fee 100/person, then break even point x needs 1.4 decrease

Breakdown approach:

X = 67% breakeven point , decrease by 67% with 1% increase in bonus



Source: JetBlue

Conclusion:

1. Airlines lose huge money every year because of delay **\$8.3 billion** every year
2. JetBlue performs worse than the rest of the industry for **6 consecutive years**
3. Although its prevailing states FL, NY, MA had the largest delay time in 2017, its delay time per flight is not the highest. Not too Bad
4. Solution 1: already taken by JetBlue last April
5. Solution 2: realistically the delay rate need a $\frac{2}{3}$ decrease. Not times decrease but rate decrease, i.e. from 15% to 5%, given no other implicit cost, e.g. customer churns



Thank you! Any questions!

