

2024 Case Question

On April 11, 2024, American Airlines announced that they would begin service from the Provo Municipal Airport (PVU) in the fall of 2024 to two of its major hubs: Dallas-Fort Worth International Airport (DFW) and Phoenix Sky Harbor International Airport (PHX).

Allegiant Air, a competitor, operated as the sole provider of commercial flights at the Provo Municipal Airport for over a decade (2011-2021). One of its busiest routes has been the Provo to Phoenix Gateway Airport, located on the border of Mesa and Gilbert, Arizona. Both suburbs in the East Valley of Phoenix, Mesa and Gilbert have long been strongholds for members of the Church of Jesus Christ of Latter-day Saints. According to the most recent statistics, the Phoenix Metropolitan area boasts over 260,000 members.¹ BYU Alumni also estimated that over 20,000 alumni reside in the state of Arizona.² Given the strength of the LDS Church membership in Arizona, it is no surprise that this route (Provo to Phoenix) has grown rapidly over the past decade to nearly 130,000 passengers in 2023.

Because of its relative distance from the state of Utah, the state of Texas does not have as many members of the LDS Church as the state of Arizona. However, the relative low-cost of living has attracted young LDS families in recent years. Consequently, the state of Texas contains a growing share of the Church membership in the US.

According to the most recent statistics, the Dallas-Fort Worth metroplex claims to have over 100,000 LDS members.³ As a whole, the state of Texas has nearly 18,000 BYU Alumni.⁴ Given this growth, it is likely that American Airlines forecasted a potential opportunity to tap the LDS market in the Dallas-Fort Worth Metro area by providing service from Provo (PVU) to Dallas-Fort Worth (DFW).

Given the growing strength of the LDS Church in Texas and American Airlines' intention of providing consistent flight service from Provo Airport (PVU) to Dallas-Fort Worth (DFW), how often would you expect American to offer a flight between the two cities?

¹ As of 2020, the Association of Religion Data Archives' (ARDA) estimated that 266,448 individuals consider themselves to adherents to the LDS Church (see <https://www.thearda.com/>)

² See <https://alumni.byu.edu/alumni-stats>, updated on February 28, 2024.

³ As of 2020, the Association of Religion Data Archives' (ARDA) estimated that 105,071 individuals consider themselves to adherents to the LDS Church (see <https://www.thearda.com/>)

⁴ See <https://alumni.byu.edu/alumni-stats>, updated on February 28, 2024.

Case Question Solution:

Actual Answer: According to a press release issued by Provo Mayor Michelle Kaufusi, American Airlines plans to provide two daily flights from Provo to DFW. If you look at the flight schedule for October, it appears that American plan to fly a CRJ700, a small regional jet with capacity of seventy-five seats.⁵

Helpful Facts:

- Allegiant Airlines, as a near local monopoly, flew 130,000 passengers from Provo to Phoenix in 2023.
- 260,000 members of the church live in the Phoenix metro area.
- 100,000 members of the church live in the Dallas-Fort Worth metro area.

Distracting Facts

- The states of Arizona and Texas boast 20,000 and 18,000 BYU alumni, respectively. This information is not helpful for answering the question because both states boast other cities with sizeable LDS populations (Tucson, AZ, and Houston and San Antonio, TX) which could skew the calculations. Given that we have numbers for the metro areas, it would make sense to use the metro-level statistics, not state-level statistics.

Key Assumptions

- Members of the church who are from the DFW metro area will travel from Provo to DFW at a similar rate as members that live in the Phoenix metro area.
- Given that Provo is a mid-size city, American will service the PVU to DFW route with a smaller regional jet (80-100 passengers).

Calculations

- There was a 1:2 ratio of passengers from PVU to PHX (130,000) to LDS members in Phoenix (260,000) in 2023
- Given a population of 100,000 LDS members in the Dallas-Fort Worth area and a similar assumption of rate of travel for LDS members in both cities, one might suggest a potential route size of 50,000 passengers per year. ($130,000 / 260,000 = 50,000 / 100,000$)
- If the student assumes a larger commercial plane (i.e., Boeing 737 with a capacity of 200) that would mean 250 flights a year ($50,000 / 200$), which would round to one flight per day ($250 / 365 = 0.68$ flights per day).
- If the student assumes a smaller regional jet (e.g., CRJ 700 with a capacity of 75) that would be 666 flights per year ($50,000 / 75$), which would round to two flights per day ($666/365 = 1.82$ flights per day).

Why do I like this question?

- Students must sift through information to determine what is relevant and what is not.
- Students must make two assumptions, one about the rate of travel of LDS members across cities and the other about the potential type of airplane that American might fly on the route.

⁵ See <https://www.mayorkaufusi.com/post/american-airlines-is-coming-to-provo#:~:text=I'm%20beyond%20thrilled%20to,Worth%20and%20one%20to%20Phoenix.>

- Students must do quick mental calculations with rounded numbers.