# Transportation Behavior
INTRODUCTION & CONTEXT

Defining the Issue

Minnesotans' transportation behaviors are changing in both rural and urban communities. The decisions that individuals and populations as a whole make regarding how they get from point A to point B have impacts on the transportation system and how MnDOT invests in infrastructure throughout the state. This paper explores recent air travel behavior changes and how the state's aviation system can adapt to serve these needs. Trends in commercial air service are identified briefly in this paper but are discussed in more detail in a separate trend analysis paper on commercial air service.

Air Travel Trends

As of 2016, Minneapolis-St. Paul International Airport (MSP) facilitated over 18 million total airplane boardings (enplanements).[1] Enplanements have increased over 16 percent from 2010, as shown in Figure 1.[2] MSP remained the 16th busiest airport in the United States as of 2016, unchanged from its position nationally in 2010.[3]

Figure 1: Total boardings (enplanements) at MSP International Airport from 2010 to 2016 [4]
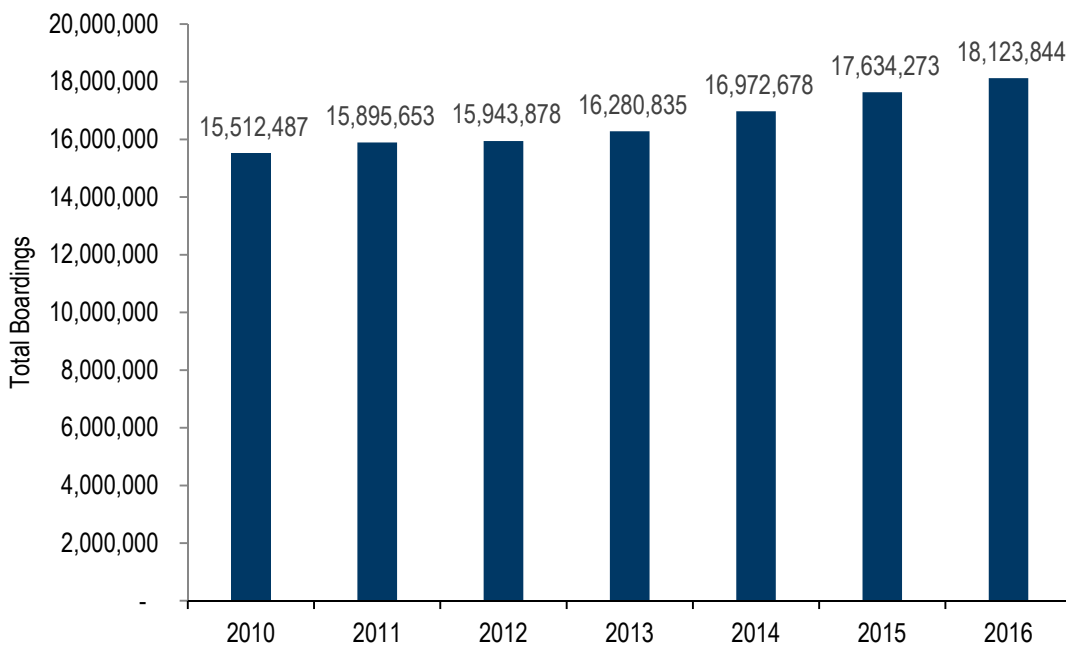
By and large, air travel in Greater Minnesota has increased since 2010. Some trends that affect commercial service to Greater Minnesota include pilot shortages, up-gauging of aircraft (using larger planes for most commercial flights), and changes to airline business models. Up-gauging of aircraft is of particular concern for small airports, as larger jets require significantly different facilities than smaller regional aircraft. In addition, up-gauging of aircraft may result in fewer flights per day to some airports, as airports in Greater Minnesota may not successfully be able to fill larger

---

[1] Federal Aviation Administration
[2] Ibid.
[3] Ibid.
[4] Ibid.

aircraft. Fewer flight options may increase the likelihood that passengers may choose to drive to MSP, increasing the concept known as leakage, when travelers elect to travel to a more distant airport instead of flying out of their local airport.

The growth in new carriers such as Southwest Airlines and the introduction of ultra low-cost carriers such as Spirit at MSP has impacted passenger behavior at Greater Minnesota commercial service airports (Brainerd, Bemidji, Duluth, Hibbing, International Falls, Rochester, St. Cloud, and Thief River Falls). The introduction of these carriers into the market has made flying more affordable for passengers who may have otherwise driven to their final destination. In addition, passengers from these communities may be more likely to drive to MSP in order to save costs instead of flying from their local airport. The introduction of these new carriers at MSP may further increase leakage at Greater Minnesota airports.

Greater Minnesota airports have seen fluctuating boardings since 2010. These fluctuations are due to many factors including airfare, flight availability, reliability, and flight schedules. Both St. Cloud and Thief River Falls have seen varying levels of commercial service from various carriers since 2010.

Some programs that support commercial service in Greater Minnesota include the federal Essential Air Service program and the state Air Service Marketing program.[5] Figure 2 shows the percentage change in airport boardings at airports in Minnesota with Minneapolis included for reference. Figure 3 shows boarding totals for Greater Minnesota airports.

Figure 2: Percent change in airport boardings (enplanements), 2013 – 2016 [49]
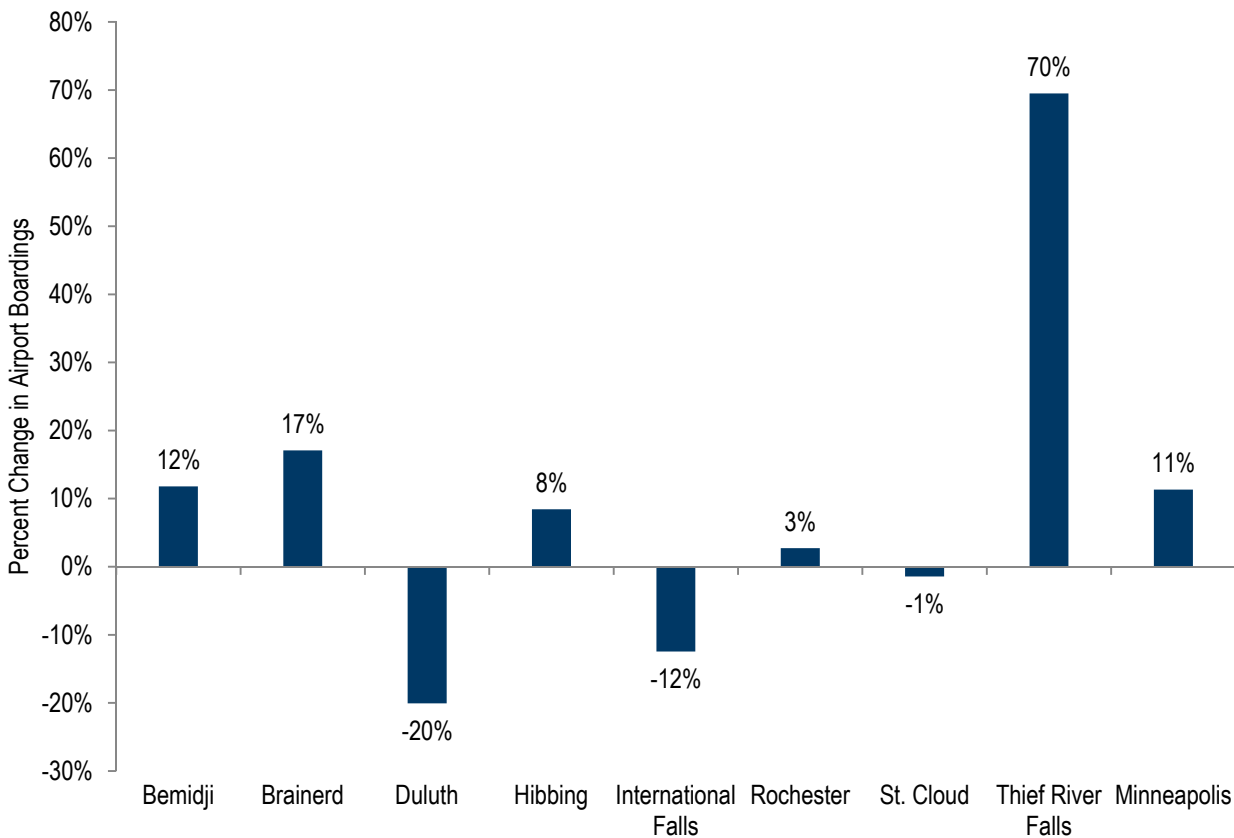
[5] Juran, Rylan Aviation Office, Minnesota Department of Transportation