



jacobsdaniels associates, llc
planning and implementation consultants

Master Plan Study

Technical Memorandum

Date: April 30, 2008

Re: 2007/2008 TAF Analysis

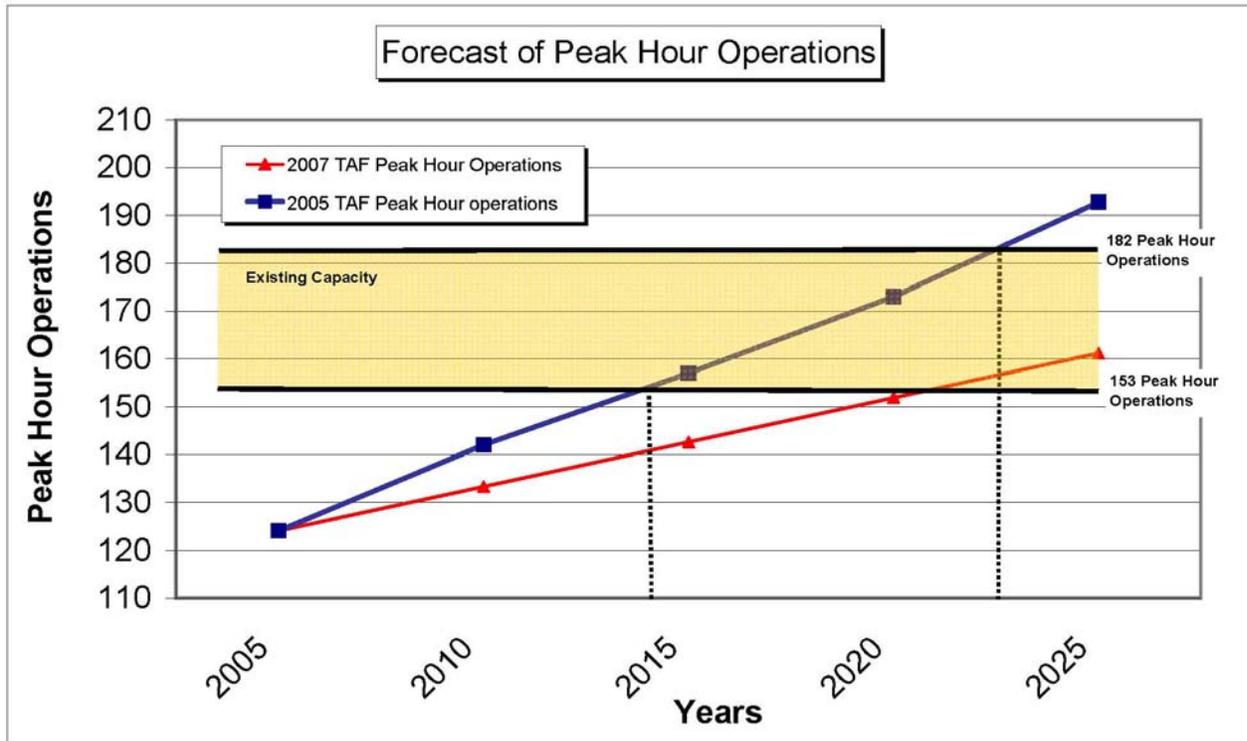
The Master Plan forecast represents the most likely growth scenario for DTW over the planning horizon. The Master Plan team conducted a rigorous validation of the 2005 FAA Terminal Area Forecast (TAF) as part of the Master Plan Study and determined that it was consistent with a number of different forecasting techniques. While the actual activity is likely to vary from the forecast in any given year, over the long-term the forecast represents the most likely activity level. This is particularly relevant given the current instability of fuel prices and the speculation of airline consolidation. The proposed merger of Northwest Airlines and Delta Airlines, for example, will almost certainly affect the level of activity at DTW in the next decade or more. Associated changes in aircraft fleets, airline operating characteristics, and market strategies will impact activity levels in positive or negative ways. While it will take several years before the actual impacts of the proposed merger are understood, DTW appears to be well positioned to realize additional activity in the coming years.

The most recent TAF (2008) for Detroit Metro Airport (DTW) is approximately 16% lower than the TAF (2006) used for the Master Plan. However, it should be noted that the FAA changes the TAF every year. For reference, in the past six years, the FAA has increased their projections twice (in 2003 and 2006) and decreased them four times (in 2004, 2005, 2007 and 2008). Twice, the TAF for DTW was essentially the same as in a previous year (2006 was the same as 2004 and 2007 was the same as 2005). *If the Master Plan forecast were to change every year based on the TAF we would never finish the study.* Nonetheless, we have reviewed the most recent TAF data to determine if it would impact the recommendations of the Master Plan. While it would change the timeframe for the fifth parallel runway, it would not eliminate the need for the runway nor would it change the location of the runway.

Exhibit 1 illustrates the peak hour operations associated with the Master Plan forecast as well as the 2007 TAF. **Exhibit 1** illustrates that even the 2007 TAF activity exceeds the lower bound of the existing airfield capacity within the planning horizon. Based on this information it may be possible to delay constructing the runway until the end of the planning horizon or even slightly beyond, but it remains evident that the runway will be needed. Even if the timeframe for additional runway capacity falls beyond 2025, it would be disingenuous for the WCAA not to include it on the Airport Layout Plan (ALP).



Exhibit 1: Comparison of 2005 and 2007 TAF Peak Hour Operations



Regardless of when the activity occurs in the future, within or beyond the 20-year planning horizon, the planning solution will not change. The Master Plan determined that an independent fifth parallel runway to the east of the existing airfield is the most appropriate way for the airport to meet the planning need (effectively, efficiently, operationally, cost-effectively, flexibly, and with consideration of the possible environmental and social impacts and costs). The rationale for including the future runway on the ALP – to preserve the airspace and to allow proper planning by federal, state and local officials – doesn’t change just because the timeframe is shifted a few years.

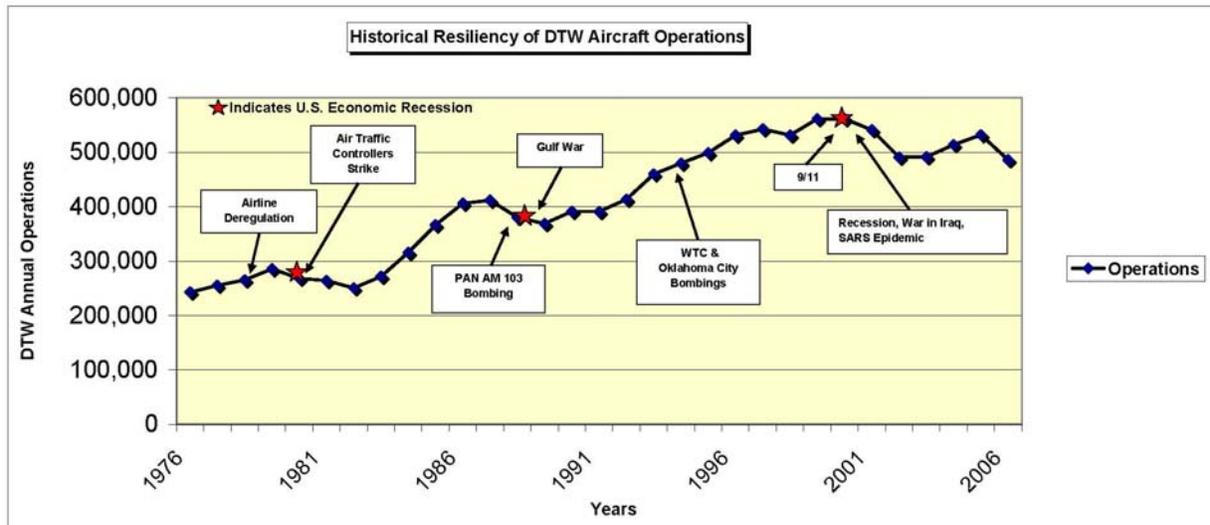
Many airports, such as Richmond International Airport and Tulsa International Airport, have included future runways on their ALP that were well beyond the planning horizon. Other airports forego forecasts in lieu of Planning Activity Levels (PALs) as a basis for planning in order to avoid the debate about the timing of the activity. This often results in extended planning horizons of 30 or even 40 years into the future. The benefit of this approach is that it enables all of the stakeholders to understand the implications of future growth without limiting the boundaries of the planning to a specific timeframe. Of course, the timing of the future activity level is still uncertain, as it is with any forecast, but the focus is on the growth scenario instead of the timeframe.



To this end, it is important to note that the FAA does not require a 20-year planning horizon for master plans. In those cases where the sponsor believes as longer planning horizon is appropriate, the FAA advises that the Master Plan should reflect concept-oriented solutions rather than detailed solutions. This is entirely consistent with the approach implemented in the current Master Plan Study.

Historically, aircraft operations at DTW have increased over time (see **Exhibit 2**). As indicated, past aircraft operations levels closely correlate with the cyclical economy and other influential world events such as war, terrorism, airline mergers and acquisitions, and the SARS epidemic.

Exhibit 2: Historical Resiliency of DTW Aircraft Operations



For reference, the previous master plan for DTW projected aircraft operations to increase from 404,000 in 1987 to over 625,000 in 2005. Despite missing the forecast projections, in large part due to the tragic events of September 11, 2001, the airport and the airlines agreed that the recommended facilities identified in the previous master plan were necessary based on the needs of the region and agreed to work together to implement them. The fact that the airport had a comprehensive master plan that included a new runway, a new midfield terminal designed for hub operations, and a new south access road enabled the airport to move quickly when Northwest Airlines decided to expand and commit to making DTW an international gateway. The ability to react quickly when opportunities present themselves is a valuable asset and a primary reason for developing a comprehensive master plan for the airport. Constraining the planning process is unlikely to position the airport for future opportunities.

The Master Plan simply provides a framework for guiding the future development of facilities based on anticipated future demand. The timeframe for realizing the future demand will depend on a number of factors outside of the control of the Airport Authority, such as fuel costs, airline mergers and acquisitions, Open Skies Bilateral Agreements, air fares, and a host of



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socioeconomic conditions within and beyond southeast Michigan. Prudent planning dictates that the airport develop and make available to the public a reasonable plan for meeting the future needs of the region.