



Renewing Texas Infrastructure

2012 Texas Infrastructure Report Card

Texas Section – American Society of Civil Engineers



General Aviation Fact Sheet

Key Infrastructure Facts: Existing Condition and Performance

- Texas has 163 general aviation (GA) airports that are included in the FAA's National Plan of Integrated Airport Systems (NPIAS) and an additional 103 other airports deemed necessary for the system. These range from small airstrips to multi-runway reliever airports with hundreds of based aircraft.
- Texas airports are home to over 19,400 active aircraft. GA airports have 5,800 based aircraft reported with 2.4 million operations. General aviation as an industry has an annual impact that exceeds \$17.7 billion in Texas and in 2010 was responsible for generating 56,635 jobs.
- Airport infrastructure, especially airfield pavements, is experiencing aging problems. TxDOT block grant funding for airports has made strides in recent years to bring infrastructure at some of the smaller GA airports to a condition of fair to good. Many smaller communities are not able to fund their portion of the needed repairs and may have airports where infrastructure is considered poor to fair. Most of the larger GA reliever airports have infrastructure which is still considered to be in fair condition, with several exceptions across the state considered to be in poor condition.
- Very few GA airports are financially self-supporting. Therefore the operations, maintenance, and capital improvements at these airports are funded primarily by the city, county or airport board that runs the airport (the Airport Sponsor). In San Antonio, a multi-airport system, the GA airport is subsidized by revenues from the commercial service airport.

Anticipated Growth and Other Future Needs

- Financial difficulties and structural changes in the airline industry compounded by the economic recession that started in December 2007 lowered expectations for aviation activity. However, because the Texas economy is expected to grow at a rate above the U.S. growth rate, Texas aviation activity growth rates are expected to grow at somewhat higher rates than the average growth rates for the nation.
- Some Texas GA airports report sufficient capacity for the near term. The exception is the twenty-four larger GA airports designated Relievers and the more active GA airports. For these airports, the amount of traffic has continued to grow and capacity is near maximum.
- The infrastructure at most GA airports continues to age and, in some cases, fail.
- The FAA projects 3.1% average annual compounded growth in Texas' GA traffic in the period from 2010 through 2020. The forecasts indicate that Texas will maintain a level of 8.31 percent of the total U.S. aircraft fleet during this period.
- As lower cost business jets are introduced into the general aviation fleet, some business traffic can be expected to use selected GA airports for ease of access and lower operating costs.
- The FAA is currently mapping new Global Positioning System (GPS) approaches into many GA airports. While this will allow use of facilities in poor weather, implementation of these approaches requires additional land, clearing of obstructions, mapping, and equipment.

- A number of GA airports, particularly in the metropolitan areas, are experiencing encroachment from residential and other incompatible land use. Residential development is most sensitive to airport operations and is nearly always and incompatible to land use if located close to an airport. Some uses are incompatible because they actually represent a danger to aircraft using an airport.

Adequacy of Current Funding and Need for Expanded Funding

- Current funding is unable to keep up with needed expansion and maintenance projects.
- The FAA's NPIAS estimated the need for \$52.2 billion in Airport Improvement Program-eligible development projects at Texas GA airports over the 5-year period from Fiscal Years 2011 to 2015. The estimate did not include planning costs necessary to provide development guidance, or funds to maintain existing infrastructure.
- Capital improvements at Texas GA airports are funded through a combination of Federal Airport Improvement Program (AIP) funds (administered by the State); Texas Aviation Facilities Development Program funds; and local funds invested by the Airport Sponsor. Federal apportionment is expected to be \$26 million annually and \$25 million in non-primary entitlement funds. State funds total approximately \$15 million annually based on current funding projections. If the AIP was funded at \$60 million per year, 30 percent of the improvement projects would be funded. The needs clearly outstrip available funding.
- TxDOT's Aviation CIP for 2012 – 2014, from which funding is programmed, has \$201 million programmed. \$164 million through federal funding, \$14 million from state funding and \$24 million local (sponsor) funding. Depending upon project eligibility and availability of funds, TxDOT may provide as much as 90% of the project costs.
- TxDOT's successful Routine Airport Maintenance Program (RAMP) allows GA airport sponsors to use TxDOT contractors and bid prices to perform a variety of maintenance work on their airports. TxDOT encourages airfield maintenance work take priority, but nearly all maintenance is eligible. Funding is 50% of project costs annually up to a \$50,000 grant amount. TxDOT also provides funding (at 50% match up to a \$500,000 grant amount) for development of new terminal facilities at GA airports, and for air traffic control towers at 90% of project costs up to \$1.5 million in federal funds.

Sources

- *Texas Statewide Long-Range Transportation Plan 2035*, Texas Department of Transportation.
- *Aviation Capital Improvement Program 2012 – 2014*, Texas Department of Transportation, August 2011, http://www.txdot.gov/business/aviation/capital_improvement.htm
- *National Plan of Integrated Airport Systems (NPIAS), 2011-2015*, Federal Aviation Administration Report to Congress (www.faa.gov)
- *2010 Texas Airport System Plan*, Texas Department of Transportation, http://www.txdot.gov/business/aviation/system_plan.htm
- *Economic Impact of Aviation*, Texas Department of Transportation, 2011, http://www.txdot.gov/business/aviation/eco_impact_aviation.htm
- Input from the General Aviation Division, Texas Department of Transportation, March 2012.