# **Town Hall Meeting**

#### Dallas Executive Airport Town Hall Meeting April 3, 2014

## Background

- 1,040 acre general aviation facility owned and operated by the City of Dallas
- 150 based aircraft including business jets and helicopters, Dallas Executive is an important link to the National Air Transportation System and is designated a reliever airport for Dallas Love Field as well as DFW International Airport
- Two full service Fixed Based Operators (FBO's)
- Fully equipped with:
  - Air traffic control tower, staffed 7 a.m. 9 p.m.
  - Full instrument landing system, with numerous instrument approaches
  - Full service restaurant
  - Business Conference Facilities

# **Capital Improvements to Date**

Capital Improvement projects completed in the last decade:

- New terminal building
- New business conference room facilities
- Aircraft apron improvements
- New Air Traffic Control Tower
- New electrical vault
- New full service restaurant
- Upgraded access control systems
- Upgraded airfield lighting and signage
- New perimeter road and perimeter fencing
- New taxiway construction
- There have also been upgrades for Dallas Fire Department #49, including a new Aircraft Rescue and Fire Fighting (ARFF) Vehicle.

## Master plan

- Initiated in 2011 to re-evaluate and adjust future development plans, the Airport's capabilities, and forecast future aviation demand.
- Objective:
  - Develop and maintain long term development program which will satisfy aviation demand
  - Be compatible with community development
  - Support other transportation modes
  - Be environmentally sensitive
- Goal:
  - Provide systematic guidelines for the Airport's overall maintenance, development, and operation in an environmentally and fiscally responsible manner.
- Submitted to the FAA for approval February 2013.
- The *final draft version* can be found at:

http://dallasexec.airportstudy.com/

#### **Runway Construction Project Background**

- The City of Dallas in partnership with TxDOT Aviation received a grant to conduct an airfield pavement analysis to determine the load bearing weight and structural integrity of the airport's runways and taxiways.
- In order to determine the structural condition and material properties below pavement surface, a dual approach of Heavy Weight Deflectometer (HWD) and Rolling Dynamic Deflectometer (RDD) testing was performed on all airfield pavements at Dallas Executive Airport between July 2012 and August 2012.
- The data derived from these two evaluations was thoroughly analyzed and a prioritized pavement rehabilitation schedule was populated. The results determined that Runway 13/31 requires nearly full-length reconstruction which involves removing and replacing existing pavement with a new pavement section.

#### **Non-destructive Testing Data**

**RUNWAY 13-31** 



PAVEMENT DEFLECTIONS (42.5 KIPS LOAD)





6

SUBGRADE DEFLECTIONS (42.5 KIPS LOAD)

#### **Pavement Evaluation Results**

- High deflection values for pavement and subgrade
- Deficient pavement strength on Runway 13/31
- Existing pavement thickness as little as 5-inches
- Remaining pavement life = 0 to 5 years







#### **Existing Pavement Thickness**



## Runway 13/31 Reconstruction Phasing



#### Runway 13/31 Final Layout



#### Runway 13/31 Reconstruction Phasing Summary

| Runway 13/31 Construction Phasing Summary   |       |   |                                   |                                       |                              |                              |  |                                   |
|---|-------|---|-----------------------------------|---------------------------------------|------------------------------|------------------------------|--|-----------------------------------|
| Description   | Phase | Estimated<br>Construction<br>Start Date | Estimated<br>Construction<br>Time | Estimated<br>Construction<br>End Date | Runway 17/35<br>Availability | Runway 13/31<br>Availability | Largest Type of<br>Aircraft Using<br>Airport | Estimated<br>Construction<br>Cost |
| Runway 17/35 & Runway 13/31<br>Intersection Reconstruction                                    | 1A    | July 2014                               | 90 Calendar<br>days               | October 2014                          | Closed                       | 3,200'                       | Multi-Engine<br>Turboprop                    | \$9,340,000<br>(Phase 1A &<br>1B) |
| Runway 17/35 & Runway 13/31<br>Intersection Reconstruction                                    | 1B    | July 2014                               | 120 Calendar<br>Days              | November 2014                         | Open<br>(After Phase<br>1A)  | 3,200'                       | Multi-Engine<br>Turboprop                    | \$9,340,000<br>(Phase 1A &<br>1B) |
| Runway 31 End Reconstruction<br>(South)   | 2     | December 2014                           | 200 Calendar<br>Days              | June 2015                             | Open                         | 4,500'                       | Medium Jets                                  | \$7,348,000                       |
| Runway 13 End Reconstruction<br>(North)   | 3     | July 2015                               | 275 Calendar<br>Days              | March 2016                            | Open                         | Closed                       | Small Jets                                   | \$9,961,000                       |
| Runway 13 Extension (685 feet)  | 4     | April 2016                              | 250 Calendar<br>Days              | December 2016                         | Open                         | 5,503'                       | All Currently Based<br>Aircraft              | \$8,700,000                       |
| 845 Calendar Days (28<br>Total Construction Time Months) Total Construction Cost \$35,349,000 |       |   |                                   |                                       |                              |                              |  |                                   |

#### **Dallas Executive Based Aircraft Data**

| Dallas Executive Based Aircraft |       |  |  |  |  |
|---------------------------------|-------|--|--|--|--|
| Туре                            | Total |  |  |  |  |
| Single Engine                   | 95    |  |  |  |  |
| Multi Engine                    | 26    |  |  |  |  |
| Jet                             | 22    |  |  |  |  |
| Helicopter                      | 7     |  |  |  |  |
| Total                           | 150   |  |  |  |  |

Examples of Aircraft by Engine Type:

Single Engine: Cessna 172 Skyhawk, Cessna 182 Skylane, Piper Cherokee, Cirrus SR20 & SR22, Beechcraft Bonanza, Piper Saratoga

Multi-Engine: Beechcraft Baron, Piper Seneca, Cessna 421 Golden Eagle

Jet: Cessna 500, 525 & 560 Citation, Falcon 900, Gulfstream, Hawker, Challenger, Beech Jet, Lear Jet, Israel Jet Commander 1124

## Non ARC D-II Aircraft

- The project does not change Dallas Executive Airport's aircraft fleet mix.
- The airport is currently classified as an Airport Reference Code D-II.
- Aircraft larger than
  - Gulfstream G150
  - Gulfstream II
  - Gulfstream IV
  - and commercial flights

Will not operate at Dallas Executive Airport.

• The airport will remain as an ARC D-II.

### Aircraft Affected by Runway 13/31 Reconstruction Project

|         | Total # of Aircraft<br>Unable to Land | Total # of Aircraft<br>Able to Land | Percentage of<br>Aircraft Negatively<br>Affected |
|---------|---------------------------------------|-------------------------------------|--|
| Phase 1 | 34                                    | 116                                 | 22.7%  |
| Phase 2 | 23                                    | 127                                 | 15.3%  |
| Phase 3 | 30                                    | 120                                 | 20.0%  |
| Phase 4 | 0                                     | 150                                 | 0.0%   |

\* By Fall of 2016 all currently based aircraft will be able to use Runway 13/31.



#### Total Aircraft Operations from 2005 - 2013

# Runway Reconstruction Summary

- Re-Construction:
  - Runway 13/31 pavement is failing and requires full-length reconstruction which involves removing and replacing existing pavement with new pavement section.
  - The life expectancy of the current pavement is 0-5 years with deficient pavement strength.
  - Scheduled to begin Summer 2014 and be completed Winter 2016, pending inclement weather changes.

# Runway Reconstruction Summary

- Proposed Extension:
  - Phase 4 of the project has not yet been approved.
  - Is necessary to correct a deficiency in the Runway Safety Area (RSA) and the Runway Protection Zone (RPZ).
  - Will provide enough space on the Runway 31 (near US Highway 67) to obtain the 1,000 foot safety area required by the FAA.
  - Although the runway is being extended, the runway threshold, or landing point on the runway, will be shifted away from the neighborhoods along Ledbetter and Westmoreland to protect these structures from landing aircraft.
  - The fleet mix for the airport will remain the same.

#### **Noise Abatement Program**

- All Aircraft utilizing Dallas Executive airport are expected to refer to their aircraft manufacturer's performance manual and utilize the standard noise abatement procedures listed for the specific aircraft.
- The airport has posted signs to ask pilots to use their aircraft's best rate of climb. We ask they gain altitude as quickly and as safely as possible when taking off and to be a good neighbor over surrounding neighborhoods.
- Please submit noise concerns or complaints through the PublicVue module located on the Dallas Executive Airport website.
  - Go to <u>www.dallasexecairport.com</u>, click on the "Community" tab and then click the "Being a Good Neighbor" link.
    - All complaints will be received and investigated for proper procedures and flight patterns.