

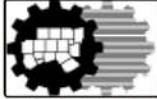
Aviation Education Initiative: Development and Implementation

Stakeholder Meeting

June 30, 2009



Michael Mallonee
Transportation Planner
North Central Texas Council of Governments



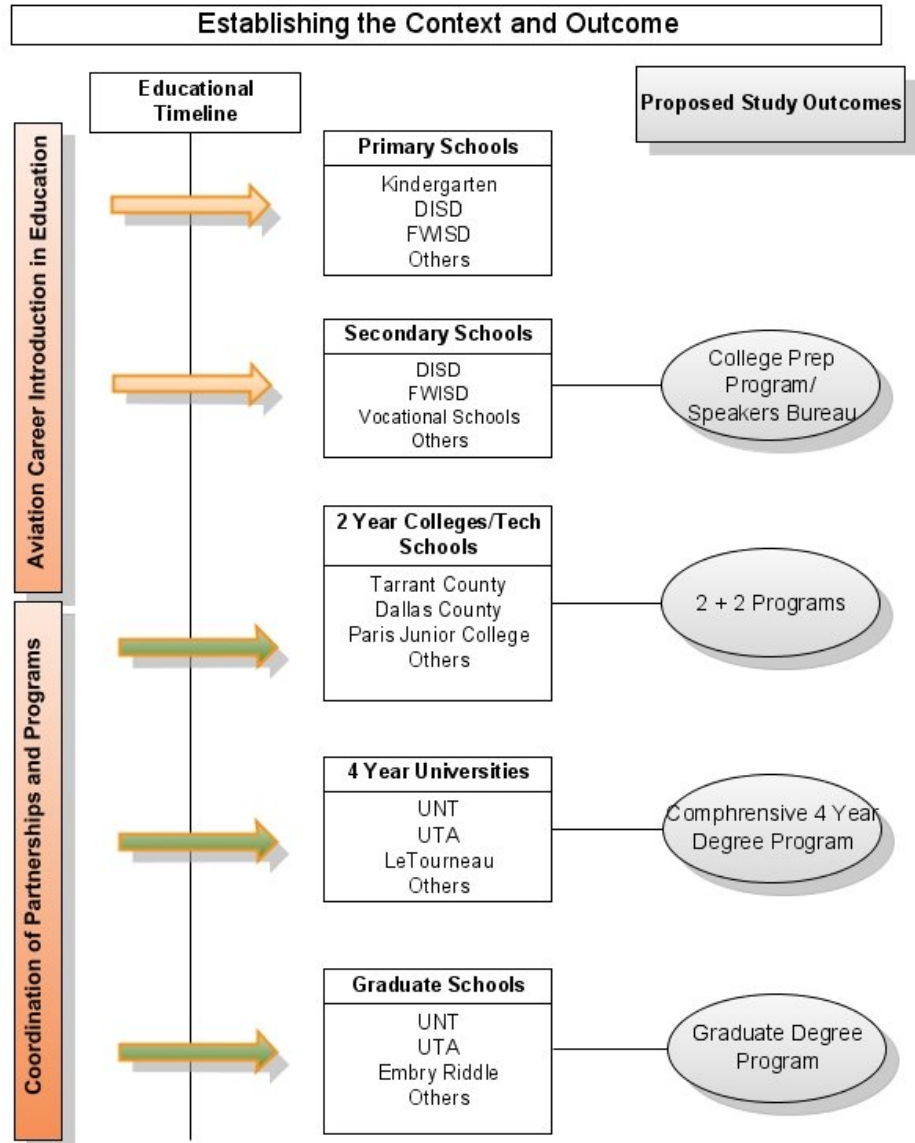
Study Context

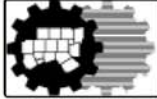


ACE Academy Event June 2009



Photo Courtesy SIU – Aviation Career Day





Scope of Work Elements

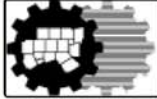
Task 1.0 Project Management

Task 2.0 Review Existing National and Regional Gap Analyses

**Task 3.0 Evaluate national and regional industry needs and
produce a Supply/Refine Gap Analysis**

**Task 4.0 Recommend Expanded, Coordinated, and Comprehensive
Regional Aviation Curriculum**

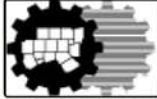
Task 5.0 Develop a Public Outreach Plan



Timeline

Project Submitted into UPWP/Funding Secured *	Fall 2008
Scope of Work Developed	Fall 2008
White Paper Update to Focus on Curriculum	November 2008
Academic Stakeholder Workshop	December 15, 2008
Industry Partners Workshop	January 21, 2009
Project Review Committee Identified	March 2009
Request for Proposals Issued	March 2009
Consultant Selected	April 2009
Notice to Proceed	May 2009
Final Report	December 2009

* Total funding for the project is \$125,000

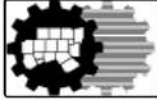


Aviation Education Initiative: Development and Implementation

For More Information:

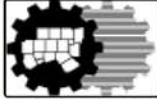
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Next Steps

- Additional Focus Group
 - Mountain View College
- Additional Stakeholder Meetings
 - September 2009
 - December 2009
- Upcoming Products
 - Supply/Need Matrix
 - Library of Careers
 - Comprehensive list of programs
 - Strategic Business Plan
 - Outreach Materials



Tour of Paris Junior College

- Paris Junior College Facilities
Wednesday, July 29
9 a.m. to 11 a.m.
Greenville Majors Field
RSVP Required



Source: GVT Terminal Development
Plan

Follow up email to come with more information.



North Texas Aviation Education Initiative: Development and Implementation

Review of Existing National and Regional Gap
Analyses and Literature Review

A Presentation to Stakeholders

June 30, 2009

Background

- Widely recognized need for additional aviation workforce regionally and nationally
- Region lacks a public university with a comprehensive four-year college aviation program



Task 2: Review Existing National and Regional Gap Analyses

- Review National and Regional studies as part of a comprehensive literature review
- Identify other literature that addresses these needs



Key Works – National Analysis

- First documented by a Texas Transportation Institute report (2003)
- Established lack of aviation higher education programs in the state – at the junior and senior level

Aviation in Higher Education: The Development of a Comprehensive Aviation Management and Commercial Pilot Program in Texas



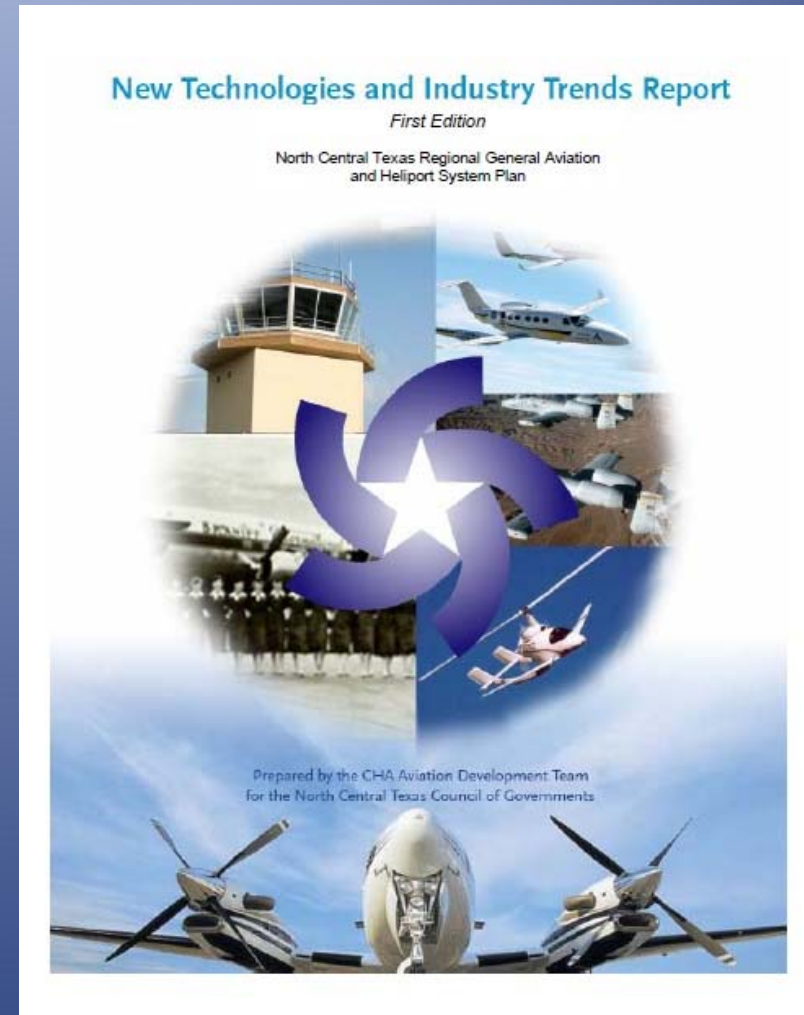
Sponsored by the Texas Department of Transportation
Aviation Division

August 2003



Key Works – Regional Analysis

- NCTCOG's New Technology and Industry Trends Report (2007)
- The Need for Coordinated Aviation Curriculum Study in North Central Texas
North Central Texas Council of Governments
(December 2008)



Other Background Materials

- Stakeholder Meetings
 - Academic (December 2008)
 - Industry (January 2009)
- State Comptroller's Report
 - Texas Works: Training and Education for all Texans
- Existing programs in Texas



Aviation Programs in Texas

- Utilized Texas Higher Education Coordinating Board – University Course Inventory to identify/update existing academic resources including both 4-year and 2-year institutions
- Only three 4-year degree programs exist; 2 public, 1 private
- None accredited by Aviation Accreditation Board International
- Several 2-year schools with degree programs
- Other programs



Aviation Programs in Texas: 4-year

- Texas Southern University - Houston, Texas
 - Accredited by the Southern Association of Colleges and Schools, Commission on Colleges
 - Undergraduate programs in the Department of Transportation Studies, which include their two airway science programs, are recognized by the FAA and accredited by the National Association of Industrial Technology



Aviation Programs in Texas: 4-year

- Texas Southern University - Houston, Texas
 - Airway Science (49.0104)
 - Airway Science Management
 - Airway Computer Science
 - 2 full-time faculty
 - 21 courses, an increase of 8 in last few years
 - These include new flight program courses and reflect changes made by Dr. Charles Glass, new director of the aviation program



Aviation Programs in Texas: 4-year

- Texas Southern University - Houston, Texas
 - Recently purchased 2 new C172s
 - New support from new administration
 - New flight program is in the works
 - Several new flight simulators
 - ATC simulator
 - Meteorology Lab
 - Affiliation with San Jacinto College



Aviation Programs in Texas: 4-year

- Texas A&M University, Central Texas– Killeen
 - Accredited by the Southern Association of Colleges and Schools, Commission on Colleges
 - Aviation Science – Management (49.0102)
 - Aviation Science – Professional Pilot (49.0104)
 - 12 aviation courses – 300/400 level
 - 1 full-time faculty member
 - Matriculation agreements with
 - Central Texas College – Aviation Science
 - San Jacinto College - Aeronautical Technology
 - Southwest Texas Junior College – Aviation College
 - Texas State Technical College Flight School



Aviation Programs in Texas: 4-year

- Texas A&M University, Central Texas– Killeen
- Internship programs:
 - Air Carriers (flight)
 - American Airlines, Southwest Airlines, ExpressJet
 - Aviation
 - Ramp Agents – Colgan Air/Waco
 - Aircraft Specialist – Centex Aerospace
 - Corporate Pilot – Home State Insurance
 - Airport Management – Killeen-Fort Hood Regional Airport
 - Flight Instructor – Mid-Way Regional Airport
 - FBO Contract Services – Houston Hobby
 - Airlines – Flight Attendant and Airline Operations



Aviation Programs in Texas: 4-year

- Baylor University (Waco)
 - Accredited by the Southern Association of Colleges and Schools, Commission on Colleges
 - Private
 - B.S. Aviation Science
 - Scientist-Pilot
 - Air quality monitoring and alternative fuels research
 - Affiliation with TSTC



Aviation Programs in Texas: 2-year

- Tarrant County College, North West Campus (Fort Worth)
 - Aircraft electronics line maintenance
 - Airframe maintenance/electronics technology
- Dallas County Community College, Mountain View Campus (Dallas)
 - Aircraft dispatcher
 - Airport management
 - Professional pilot
- Central Texas College (Killeen)
 - Aviation maintenance technology
 - Aviation science



Aviation Programs in Texas: 2-year

- San Jacinto College (Pasadena)
 - Aviation management
 - Pilot development program
 - Aircraft maintenance management
- South West Texas Junior College (Uvalde)
 - Career pilot technology
- Texas State Technical College (Waco)
 - Aircraft pilot training technology
 - Aviation maintenance technology
 - Avionics technology



New Aviation Programs in Texas

- University of North Texas – Denton, Texas
 - Developing a program in Aviation Logistics
 - Provost has signed off on program
 - Board of Regents approval – May 2009
 - THECB approval
 - UNT College of Business - Center for Logistics Education and Research
 - B.S. Aviation Logistics
 - Fall 2010 program start
 - Student Aviation Association



Aviation Programs/Resources in North Texas

- Mountain View College – pursuing ATC school
- Tarrant County Community College
- Paris Junior College/L-3
- Letourneau (Longview, private)



Aviation Programs/Resources in North Texas (outreach)

- ACE Academies
- Summer Transportation Institutes
- High School Programs
- Civil Air Patrol
- Industry Representative Programs
 - AOPA, NBAA, EAA
- DFW Career Fair



Literature Review

- Review/Update of National and Regional Reports
 - TTI: *Aviation in Higher Education: The Development of a Comprehensive Aviation Management and Commercial Pilot Program in Texas*
 - NCTCOG : *New Technologies and Industry Trends Report*
- Dissertations (ProQuest Database)
 - New and emerging research areas of interest
 - Examples



Literature Review

- Performed comprehensive literature search
 - Search Terms: aviation education, aviation higher education, collegiate aviation
- TRIS Database – Transportation Research Information Service
- Focused on materials relevant to the need of a 4-year program in aviation
 - Upper division courses
 - Not a vocational education program
 - Connectivity between 2- and 4-year programs



Summary of Review

- Gaps exist
- Aviation Education Initiative will help fill gaps
 - Strategic Business Plan for implementation
 - Outreach Materials
 - Development of Seamless transitions



Additional Research—Focus Groups

- A series of three focus groups to solicit opinions, perspectives about aviation careers
- Locations: ACE Academy, Tarrant County College and Mountain View College
- Target audience: young adults high school age to 25



ACE Focus Group

- Sponsored by Organization of Black Pilots, FAA
- 13 high school students, college bound
- Higher Ed opportunities: UNT, UT, A&M, MIT, Rice, Embry-Riddle, Air Force Academy, TSTC
- Affordability the most important college selection factor among most participants
- Too costly to go out of state; scholarships, financial aid important



Tarrant County College Focus Group

- 8 TCC students, 3 others
- Ages varied, several seeking second and third careers
- Strong fascination with airplanes, helicopters, flying
- Affordability and proximity to “home”
- Value certifications over college degrees
- Airframe & Power Plant Mechanic (A&P) certification



Preliminary Findings

- Internet is primary information source
- College counselors don't always provide aviation information
- Out-of-state schools are often too expensive, too far
- More school choices are needed "locally"
- Support in finding jobs is very desirable

