



# Regional Strategies

non-traditional, cluster-based grant programs

## **Aerospace Workforce Innovation Network (AWIN)**

*Aerospace and Defense Industry Cluster*

Houston (Harris County/Gulf Coast Region)

**Meeting Industries' Critical Workforce Needs**

# ***Aerospace Workforce Innovation Network (AWIN)***

## **Executive Summary**

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- **AWIN Purpose:**

***Develop creative/collaborative responses to major workforce transitions in the aerospace industry occurring because of Shuttle phase out and Constellation startup.***

# ***Aerospace Workforce Innovation Network (AWIN)***

## **Regional Partners and Stakeholders**

- **Key partners:** Bay Area Houston Economic Partnership, San Jacinto College/Aerospace Academy, College of the Mainland, University of Houston-Clear Lake, University of Houston-Central-College of Engineering, University of Houston-Central, College of Technology, Space Center Houston, regional high schools, Gulf Coast Workforce Board
- **Key stakeholders**
  - **Employers:** NASA and its contractors
  - **Industry advisory groups:** Aerospace Advisory Board, Johnson Space Center Workforce Transition Committee, others
  - **Regional leadership and planning agencies:** Above partners and groups plus Gulf Coast Workforce Board
  - **Target impact groups:**
    - Incumbent or dislocated workers
    - Attraction and retention of students
    - Transitioning workers
    - Development of educators and councilors

# ***Aerospace Workforce Innovation Network (AWIN)***

## **Cluster Impact Strategies & Deliverables**

- **Innovative high school through graduate credit and continuing education curriculum development and activities to inspire youth 14 and older**
  - ***Develop a process to map key industry transition points***
  - ***Develop a Competency Model and set priorities for filling gaps***
  - ***Develop articulated career paths/ladders/lattices that consider workforce transitions***
  - ***Develop/implement a program to assist impacted workers***

# ***Aerospace Workforce Innovation Network (AWIN)***

## **Cluster Impact Strategies & Deliverables**

- **Curriculum development**
  - ***UH Engr: Aero engineering grad/undergrad online courses; aero modules for high schools/college/public***
  - ***UHCL: Grad engineering mgmt courses; online systems engineering courses/certification***
  - ***UH Tech: Info security courses***
  - ***San Jacinto College: CE upgrade courses***

# ***Aerospace Workforce Innovation Network (AWIN)*** **Cluster Impact Strategies & Deliverables**

- Articulation agreements
- Scholarships:
  - ***UH Engineering: Grad aero engineering***
  - ***SJC: 500 dual credit STEM students***
  - ***COM: STEM students***

# ***Aerospace Workforce Innovation Network (AWIN)***

## ***Cluster Impact Strategies & Deliverables***

- **High school activities**
  - ***STEM workshops at SJC and COM: 200 teachers/counselors***
  - ***Aero STEM distance learning for teachers/900 students (from Space Center Houston)***
  - ***Week-long summer STEM workshops at JSC: 40 high school students***
  - ***Summer dual credit workshops: 900 SJC students***
  - ***Summer engineering workshops at COM***

# ***Aerospace Workforce Innovation Network (AWIN)***

## **Cluster Impact Strategies & Deliverables**

- **Sustainability Strategy**
  - ***New and innovative products to use/disseminate during and after the project***
  - ***Continuous Process Model to guide further development and delivery of activities***
  - ***New courses to deliver post project with other funds***



# ***Aerospace Workforce Innovation Network (AWIN)***

## **Key Issues and Challenges**

### **■ Process issues**

- **Proposal Development:** Large partnership involving industry/government/education/economic development
- **Project/Contract Management:** BAHEP lead partner; subcontract to SJC; other subcontracts

### **■ Project issues**

- **Defining the problem or opportunity:** Made possible because of prior relationships with the industry
- **Developing regional partnerships:** Made possible because of extensive experience in multi-partnering
- **Identifying resources:** Individually and collaboratively
- **Prioritizing strategies:** Individually and collaboratively
- **Defining aerospace skill needs:** Ongoing with extensive prior work representing jumping off point
- **Attraction and recruitment:** Major focus because of immediate and long-term industry needs

# ***Aerospace Workforce Innovation Network (AWIN)***

## **Primary Contacts**

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- **Grant Recipient: *Bay Area Houston Economic Partnership***
- **Grantee Project Manager: *Bob Mitchell***
- **TWC Project Manager: *Robert Pounds***
- **TWC Cluster Manager: *Kaki Leyens***