

Appendix 2: Center Logic Model

UTSA Logic Model

This model will be refined as a product of meetings with UTSA stakeholders and a Center-wide project management team in collaboration with NOAA. A detailed evaluation plan will be developed based on the resulting logic model.

Inputs/Resources	Activities/Strategies	Outcomes & Products	Impacts
<p>UTSA</p> <ul style="list-style-type: none"> ▪ College of Science ▪ College of Engineering ▪ College of Business ▪ College of Liberal & Fine Arts ▪ UTSA University Career Center ▪ Center for Water Research ▪ Open Cloud Institute ▪ Institute for Cyber Security ▪ Texas Sustainable Energy Research Institute <p>Academic Partners</p> <ul style="list-style-type: none"> ▪ KU ▪ TAMUCC ▪ ECSU ▪ Alamo Colleges <p>NOAA Partners</p> <ul style="list-style-type: none"> ▪ NESDIS ▪ STAR ▪ NIC ▪ NWS ▪ NOS <p>Other Partners</p> <ul style="list-style-type: none"> ▪ SwRI ▪ CRREL ▪ RackSpace ▪ JPL ▪ GSFC 	<p>Education Activities</p> <ul style="list-style-type: none"> ▪ Recruit, educate, train, and mentor students in K-12 to postdoc pipeline ▪ Develop new academic programs, curricula, and courses ▪ Provide scholarships & fellowships ▪ Provide research internships and summer research opportunities ▪ Conduct monthly Center-wide seminars ▪ Outreach to general public and K-12 schools ▪ Conduct workshops for K-12 educators <p>Partnering Strategies</p> <ul style="list-style-type: none"> ▪ Establish a strong partnership with academic partners, NOAA and industry <p>Management Strategies</p> <ul style="list-style-type: none"> ▪ Conduct all relevant management tasks ▪ Track participating students over time 	<p>Research Outcomes</p> <ul style="list-style-type: none"> ▪ Five integrated focus areas ▪ Six technology areas ▪ New knowledge and publications <p>Education Outcomes</p> <ul style="list-style-type: none"> ▪ Instructor-led core courses ▪ Online courses ▪ New PhD program ▪ Individual Student Development Plans ▪ Capstone design course <p>Products</p> <ul style="list-style-type: none"> ▪ UTSA-based NOAA cloud platform ▪ Social Science Integration ▪ Management Documents ▪ Evaluation Plan ▪ Data Management Plan ▪ Administrative Plan 	<p>UTSA & Partners</p> <ul style="list-style-type: none"> ▪ Established, sustainable, multi-institution, multi-disciplinary center of excellence ▪ Sustainable growth and enhancement of partnerships <p>NOAA</p> <ul style="list-style-type: none"> ▪ Developed model for establishing research programs ▪ Trained mission-related workforce ▪ Increased participation of underrepresented populations <p>Students</p> <ul style="list-style-type: none"> ▪ Educated in sciences, engineering, socioeconomic and public policy, and prepared to become leaders <p>Faculty & Researchers</p> <ul style="list-style-type: none"> ▪ Enhanced/expanded research stream ▪ Funded student researchers

Appendix 3: Results from Assessments of Needs

Results from Assessment of Needs for NOAA Mission Future Workforce

Needs	Center Strategy	Performance Measure	Goals
Increase the number of students from underrepresented groups who consider education and career pathways in disciplines that support NOAA's mission.	Conduct workshops for K-12 educators	# of teachers enrolled in workshops	20 teachers per year
	Outreach to general public and K-12 schools	# of presentations	560 UTSA 1395 ECSU per year
	Actively recruit minority students for Undergraduate STEM	# of undergraduate students participating in Center	31 per year
Increase the number of Postsecondary students, particularly from underrepresented groups, who pursue and complete degrees in disciplines critical to NOAA's mission.	Actively recruit minority students for master's and PhDs	# of URM students enrolled in Graduate Programs in STEM fields	Increase the # of Center URM graduate students enrolled by 7%
	Decreased time to degree for underrepresented students in Graduate Programs	Time to degree	2.4 years for Masters 5 years for PhD
	Increase the number of degrees earned annually in NOAA mission-related disciplines	# of students graduating with STEM degrees	25 undergraduate 10 Master and 5 for PhD
Increase the number of minority students entering the NOAA workforce	Establish a comprehensive mentorship program coupled with On-Site Experiential research at NOAA to establish employment opportunities with the NOAA line office and collaborating centers	# of Center Students employed at NOAA	10 over 5 years
Provide students, particularly those from underrepresented groups, with experiential learning, research, and scholarship opportunities	Provide students at 2C and 4C schools that have limited research opportunities access to the Sophomore Rising summer program	# of participants	25 per year
	Provide students at 2C and 4C schools that have limited research opportunities ongoing access to research training and engagement activities.	# of participants	25 per year
	Increased competence in applying STEM to decision making, policy and management by providing seminars and all hands presentations in Management, Project Management and professional skills development	# of programs per year	12 seminars/ presentations per year
	Provide scholarships to undergraduate and graduate students to remove financial barriers from Center participation	# per year	62 annually