

Track 2 Tri-state EPSCoR Logic Model

Project Goal - The Track 2 project will promote knowledge transfer to scientists, educators, students, and citizens within and beyond the Consortium by enhancing state CI, and to enable the community science that is required to address regional to global scientific and societal challenges.

Inputs	Outputs		Outcomes		
	Activities	Participants	Short-term	Medium-term	Long-term
NSF Track 2 EPSCoR funding Educational institutions • DRI • UNR • UNLV • UI • ISU • BSU • UNM • NMT Community colleges High schools Middle schools Businesses Industry Networks – DataONE – CUAHSI – NOAA – neon	<ul style="list-style-type: none"> Purchase, develop and/or use equipment and tools Establish facilities Establish cyber-infrastructure including data portals, software, hardware, connectivity, bandwidth, inter-operability, and data access Conduct collaborative and/or interdisciplinary research Use new knowledge, facilities, equipment, and cyberinfrastructure Communicate findings through papers and presentations Outreach to community /businesses/agencies Develop plans, programs, centers, instructional materials Conduct and/or attend trainings and meetings <ul style="list-style-type: none"> – Tri-state consortium meeting – Summer institutes for teachers – CI training workshops – CI for industry training – Interdisciplinary working groups – Cyberlearning Summit – Interdisciplinary Modeling course – Develop curricular materials – Extracurricular CI activities Hire/train/mentor people Influence individuals educational and career opportunities/choices Tri-state Website 	<ul style="list-style-type: none"> Scientific researchers Middle school teachers High school teachers Community college and university faculty Middle school students High school students Community college and university undergraduate students Graduate students Postdocs Business owners Policymakers 	Objective 1 - Increase connectivity and bandwidth to increase collaboration		
			Increase the*: <ul style="list-style-type: none"> Number of improved speed connections Number of connections/site Number of connections/machine Utilization into the state Utilization with in the state Utilization by institutions Number of portals User satisfaction with network improvements 	<ul style="list-style-type: none"> Increase the quality of long distance, web based communication and conferencing Increase the frequency of long distance, web based communication and conferencing Increase access and use of web-based tools and software Increase access and use of web-based information 	<ul style="list-style-type: none"> Increase and sustain connectivity and bandwidth Increase communication and collaboration between researchers, educators, business owners, and policymakers Improve research competitiveness, STEM education, and economic development
			Objective 2 – Enhance data and model interoperability to improve research outcomes		
			<ul style="list-style-type: none"> Develop a standardized model to assimilate, manage, visualize and analyze data and models Invite data submissions Assess usability of data portal and data products Increase usability of data portal Increase usability of data products Improve interoperability between models and other software components Integrate portal with national networks 	<ul style="list-style-type: none"> Increase the number of data submissions to expand data archive Increase the number of researchers whose data is represented in the data portal Publicize the data portal Increase the number of people who access the data portal Increase the number of people who download and use the data products Reduce need for training and assistance with data portal use 	<ul style="list-style-type: none"> Develop and sustain a model and data interoperability framework Build and sustain an interoperability data archive Integrate with national networks Increase data intensive research Increase research capabilities Increase the number and quality of research outcomes Increase data sharing Improve research competitiveness
			Objective 3 - Utilize CI to integrate research with education to improve learning		
			<ul style="list-style-type: none"> Improve the quality of educational information and tools Increase access to educational information and tools Present data in user friendly formats - spreadsheets and tables Present information in user friendly formats- maps, models, and graphs Train students, researchers, educators, business owners, and policymakers in climate modeling, hydrologic information systems, teragrid, Linux clusters, etc. 	Increase educators, students, industry: <ul style="list-style-type: none"> Access to scientific information Ability to store scientific information Use of and interaction with scientific information Understanding of scientific information Knowledge and skills necessary to use cyberinfrastructure 	<ul style="list-style-type: none"> Integrate research with informal and formal education Build human capacity Support students in the STEM pipeline Improve STEM curriculum and instructional strategies Increase student learning Improve ability to make knowledge based decisions Improve ability to address societal issues related to scientific causes Improve economic development

*Some items are state specific.