San Bernardino Investment Playbook

Innovation EXPLORATORY

Project Details: Sustainable Logistics Center of Excellence

A Sustainable Logistics Center of Excellence in downtown San Bernardino will accelerate multidisciplinary, cross-sector innovation in order to address pressing challenges facing the logistics sector, including decarbonization and climate adaptation, skilled workforce development, and economic competitiveness and resilience. As a hub for open innovation, this 20,000-ft^2 facility will bring together key stakeholders from industry, academia, government, nonprofits, and community-based organizations in order to establish the Inland Empire as a global exemplar of next-generation sustainable logistics. Special emphasis will be placed on building capacity to deliver educational programs and experiential learning opportunities to students from high school through PhD.

Active private-sector involvement will ensure that the Center's activities are aligned with the logistics industry's most pressing needs. The Center will provide access to facilities where academic and industry partners can conduct demonstration projects on innovative new technologies. Partners will be able to use onsite facilities as well as a network of testbeds and specialized equipment located at UCR and its College of Engineering's Center for Environmental Research and Technology (CE-CERT), CARB, and other sites. UCR's Entrepreneurial Proof of Concept and Innovation Center (EPIC) and CSUSB's Entrepreneurial Resource Center will help technology startups access specialized mentorship and seed capital for proof-of-concept demonstrations. CSUSB's Sustainable Mobility Hub will provide space for cross-sector collaboration and leadership development. Other participating academic institutions will include the San Bernardino Community College District, the Riverside Community College District, Chaffey College, Cal Poly Pomona, CSU Long Beach, and CSU Fullerton.

The Sustainable Logistics Center of Excellence will also support the formation of employer partnerships that bring firms with similar skills needs, educational institutions, workforce training providers, support services, and other relevant stakeholders together to create clear, well-supported pathways into high-demand occupations in sustainable logistics and transportation now and in the future. It will encourage collaboration among logistics companies that are moving away from carbon-based fuels so that they can benefit from one another's experiences and identify opportunities for cooperation on workforce development, decarbonization, and hyperconnected logistics models powered by multiparty networks, open synchromodal technologies, big data, and artificial intelligence.

RATIONALE

Nowhere is the need for innovative climate solutions more apparent than in the logistics and transportation sector. As one of the world's most carbon-intensive industries, it plays a vital role in the circulation of goods and people at the local, national, and global levels. Unwinding this industry's reliance on carbon-based energy will require an entirely new approach that takes into account both the need for rapid transformation and the interconnected and interdependent nature of our world.

The Southern California logistics corridor offers an ideal proving grounds for such an approach. Extending from the Ports of Los Angeles and Long Beach to the Inland Empire, it encompasses a vast transportation infrastructure of rail lines, terminals, and roadways and represents the largest concentration of logistics facilities in the Americas. For this sector and for the Inland Empire more broadly, reduction of greenhouse gas emissions and improvements in environmental justice is an existential imperative.

OBJECTIVES

- Establish the Inland Empire as a global leader in sustainable logistics and supply chain innovation
- Expedite decarbonization at scale in the logistics sector
- Bolster regional economic competitiveness in logistics and other sectors relevant to climate adaptation and carbon neutrality
- Increase collaboration among industry employers, higher education, and other relevant stakeholders
- Strengthen career pathways into quality jobs

COST (preliminary estimates)

$50.9M	Research / innovation staff and operations
$50M	Technology / innovation infrastructure
$19.1M	Education infrastructure
$12.4M	Outreach and logistics ecosystem development
$10M	Building construction
$7.6M	Center operations and shared services
$150M	**TOTAL** over five years

LEAD ORGANIZATIONS

Leonard Transportation Center and Department of Information Decision Sciences, CSUSB

Opportunity to Advance Sustainability Innovation and Social Inclusion (OASIS), UC Riverside

Georgia Institute of Technology

Inland Economic Growth and Opportunity

Inland Empire Economic Partnership