CCALS Commonwealth Center for Advanced Logistics Systems

October 22, 2025

The Honorable Juan Pablo Segura
Secretary of Commerce and Trade
Commonwealth of Virginia
Patrick Henry Building
1111 East Broad Street
Richmond, Virginia 23219

The Honorable Luke Torian
Chair, House Appropriations Committee
Virginia House of Delegates
201 N. 9th Street
General Assembly Building, 12th Floor
Richmond, Virginia 23219

The Honorable Mark Sickles
Vice Chair, House Appropriations Committee
Virginia House of Delegates
201 N. 9th Street
General Assembly Building, 12th Floor
Richmond, Virginia 23219

The Honorable Louise Lucas
Chair, Finance and Appropriations Committee
Senate of Virginia
201 N. 9th Street
General Assembly Building, 13th Floor
Richmond, Virginia 23219

Michael Maul
Director, Virginia Department of Planning and Budget
1111 East Broad Street
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President and CEO
Virginia Innovation Partnership Authority (VIPA)/Virginia Innovation Partnership Corporation (VIPC)
313 East Broad Street
Richmond, Virginia, 23219

CCALS Commonwealth Center for Advanced Logistics Systems

Commonwealth Center for Advanced Logistics Systems ("CCALS")

Ladies and Gentlemen: Respectfully submitted is the full and complete CCALS report as required by Section M.2 of Item 127 of the 2023 Session enrolled budget. This report covers the period from July 1, 2024 through June 30, 2025 as called for in budget language (as follows):

M.1. Out of the appropriation in this Item, $350,000 the first year and $350,000 the second year from the general fund is designated for the Commonwealth Center for Advanced Logistics (CCALS) to provide seed money for collaborative public sector projects with partners, such as the Port of Virginia, Department of Corrections, and the Virginia Department of Transportation.

2. CCALS shall submit a report by October 1st of each year to the Secretary of Commerce and Trade, the Chairs of the House Appropriations and Senate Finance and Appropriations Committees, the Director of the Department of Planning and Budget, and VIPA to include (i) all planned and actual revenue and expenditures along with funding sources, including state, federal, and other revenue sources for CCALS, (ii) the research activities of CCALS, and (iii) relevant economic outcomes as a result of the CCALS' work in each fiscal year.

Sincerely,

Dr. Dawit Haile, Interim President and Executive Director, CCALS

cc w/enclosure: Karen Jackson, Senior Fellow, CCALS

Commonwealth Center for Advanced Logistics Systems (CCALS)

Report of Unaudited Revenues, Funding Sources, Research Activities and Relevant Economic Outcomes For Fiscal Year 2025

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CCALS Commonwealth Center for Advanced Logistics Systems

Background

CCALS Mission

CCALS is a multi-university, multi-disciplinary ecosystem that provides an opportunity for faculty and students to collaborate with private, public, and nonprofit sector professionals to proactively engage logistics and supply chain challenges through projects, research experiences, and career-ready workforce opportunities.

CCALS Board of Directors

Dr. Jeffrey J. Fox, Chair
Assistant Dean for Research, University of Virginia Engineering and Applied Science

Dr. Kuntal Bhattacharyya
Director, School of Supply Chain, Logistics and Maritime Operations, Old Dominion University

Dr. Azim Eskandarian
Dean, College of Engineering, Virginia Commonwealth University

Dr. Dawit Haile
Dean, College of Engineering and Technology, Virginia State University

Eric Jehu
Vice President, Logistics, Virginia Economic Development Partnership

Andrew Sinclair
Executive VP, Public Policy Development and Executive Director, Virginia Chamber Foundation
Virginia Chamber of Commerce

Barbara Nelson
Vice President, Transportation and Government Affairs, Port of Virginia

Dr. Khawaja Mamun
Dean, College of Business and Economics, Longwood University

CCALS Staff

Senior Fellow (part-time), the Honorable Karen Jackson, former Commonwealth Secretary of Technology. In this capacity, she works to develop opportunities for CCALS universities to collaborate on logistics and supply-chain-related research, problem-solving, and industry relevant engagements and experiences.

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CCALS Board Members

The Port of Virginia
portofvirginia.com

Virginia Economic Development Partnership | vedp.org

Virginia Chamber
vachamber.com

Longwood University
longwood.edu

Old Dominion University
odu.edu

University of Virginia
virginia.edu

Virginia Commonwealth University
vcu.edu

Virginia State University
vsu.edu

Crater Planning District Commission | craterpdc.org

Memberships

CCALS is a proud member of:

Center for Hardware and Embedded Systems Security and Trust | nsfchest.org

The Chartered Institute of Logistics and Transport
ciltna.com

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Required Report Elements

Budget Language:

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CCALS Highlights

Return on Investment

CCALS program/project portfolio continues to expand industry-centric opportunities and engagements. Projects in the active CCALS portfolio fall into two primary categories:
1. CCALS identified, initiated, managed (logistics baseline, hydrogen-hybrid, energy-centric UAS), and
2. University identified and conducted with CCALS support (such as SAF).

As depicted in the chart below, most projects span multiple (fiscal) years demonstrating strong relationships with partners and funders (state, private, and federal). Since 2018, CCALS has generated more than $4,693,110 in logistics and supply chain-related research.

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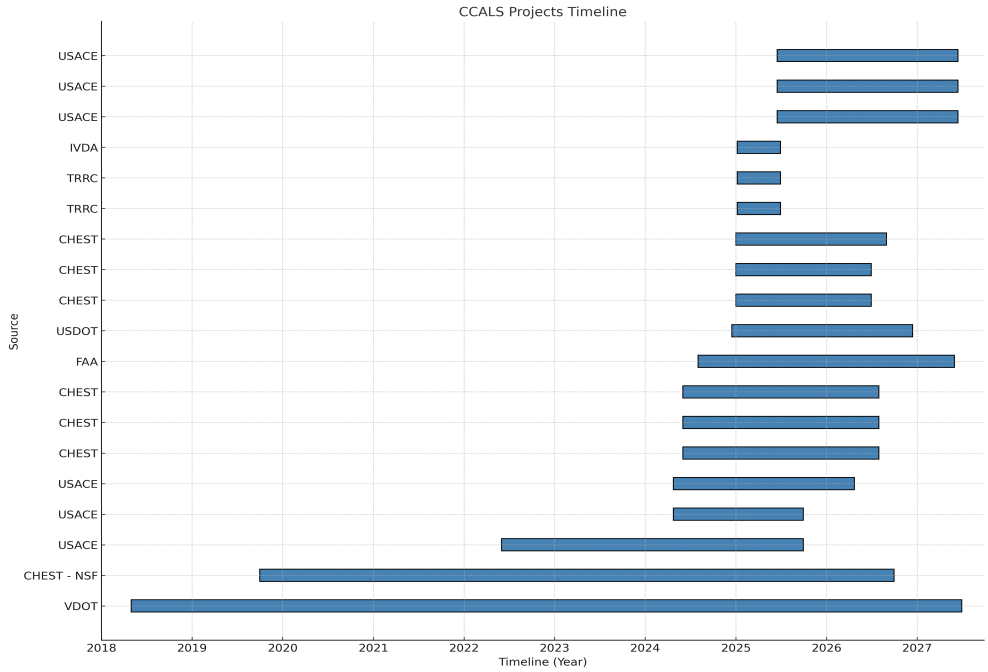

In FY2025, CCALS' $199,000 investment in projects returned more than $1.2 million in advanced (applied) logistics research investment. Key projects included:

Synthetic (Sustainable) Aviation Fuels – Ongoing. Modeling and Simulations related to use/production/consumption of Sustainable/Synthetic Aviation Fuels. CCALS presented findings to the Aviation & Aerospace Caucus (General Assembly, Jan 2025) and contributed to the report submitted via legislative letter by the Department of Aviation.
Partners: *UVA, CCALS, Commercial Aviation Alternative Fuels Initiative (CAAFI), DOAV, Virginia Aviation Business Association (VABA), FAA (FAST-SAF program)*

Hydrogen-Hybrid Applications in Southern Virginia – Report Filed. Ten CCALS fellows worked under the direction of the CCALS Sr. Fellow to assess potential H-HE applications in Southern Virginia.
Partners*: Planning grant funded by Virginia Tobacco Commission – Energy Ingenuity Fund*

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James E. Campos • 1st
Executive Director, VA TRRC / Cabinet Deputy Secretary of Commerc...
1mo •

The TRRC is helping meet tomorrow's needs for power generation and advanced technology.
#innovation #energy #technology #Commonwealthofvirginia

Virginia Tobacco Region Revitalization Commission
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Through our Energy Ingenuity Fund, the Tobacco Region Revitalization Commission is making strategic investments to position Southern and Southwest Virginia, as well as the Commonwealth as a whole, as leaders in energy-dependent industries such as unmanned aerial systems (UAS) and autonomous air mobility (AAM). In January 2025, the Commission awarded two Energy Ingenuity Fund planning grants to the Commonwealth Center for Advanced Logistics Systems (CCALS) to explore the potential for hydrogen-hybrid applications in Southern Virginia and evaluate the feasibility of creating an Energy-Centric UAS Center for Critical Infrastructure in the TRRC footprint.

"Using the Commission's funding as a catalyst for collaboration, CCALS leveraged support from the Virginia Department of Aviation, Richard Bland College, the UAS Center at SBD, a student team drawn from CCALS' member universities, and input from across related industries to conduct analysis and deliver final results and recommendations - some of which hold the potential to advance regional priorities while simultaneously strengthening Virginia's strategic position in every-evolving national priorities," said TRRC Executive Director James Campos. (James E. C.)

#UAS #BVLOS #Energy #innovation #next-gen #AAM

Feasibility of developing an Energy Centric UAS Center in the Tobacco Commission Footprint – Report Filed. CCALS Sr. Fellow collaborated with DOAV, the UAS@SBD, Richard Bland College and members of the energy industry in Virginia to determine the feasibility of establishing an Energy-Centric UAS Center in the Tobacco Commission Footprint. ***Partners**: Planning grant funded by Virginia Tobacco Commission – Energy Ingenuity Fund*

Feasibility of developing an Energy Centric UAS Center for Critical Infrastructure in the Tobacco Commission Footprint – Application Submitted. Building on the findings from the two TRRC planning grants (listed above), CCALS submitted an implementation grant (TRRC Energy Ingenuity Fund) to launch a $490k "Energy-Centric UAS Center for Critical Infrastructure" in the TRRC Footprint. ***Partners**: CCALS, DOAV, UAS@SBD, Richard Bland College*

Next-gen Multi-modal Infrastructure Analysis and Planning – Ongoing. Modeling and Simulations related to the feasibility of constructing next-gen Multi-modal infrastructure ***Partners**: VEDP, CCALS, UVA*

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International Logistics Conference (Oct 23-24, 2025) – Planning Underway. CCALS has partnered with the Chartered Institute of Logistics and Transportation – North American Chapter to host the Commonwealth's first "Next-Gen Logistics Conference" at Old Dominion University. The conference will be hosted by Longwood University in 2026.

***Partners**: CILTNA, ODU*

Talent Development

CCALS employed 10 Fellows (under the direction of the Sr. Fellow) for project-related activities during FY25. The multi-university team worked on topics of importance to the Commonwealth, including Sustainable Aviation Fuels, Hydrogen-Hybrid Applications, and Unmanned Systems.

Institutions represented included: Old Dominion University, Virginia Commonwealth University, The University of Mary Washington, University of Virginia, and Longwood University.

Business Advisory Council

In FY2025, CCALS Business Advisory Council increased its membership by 14 new industry leaders representing the technical, business, and policy aspects of supply chain management and logistics, bringing the total membership to 24.

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CCALS Commonwealth Center for Advanced Logistics Systems

Financial Report

Commonwealth Center for Advanced Logistics Systems
Revenue & Expense Budget vs. Actual (NON-PROFIT)
Accrual Basis — **July 2024 through June 2025**

	Jul '24 - Jun 25	Budget	$ Over Budget
Ordinary Income/Expense			
Income			
Revenues			
Grant Income	31,829.37		
Federal	0.00	0.00	0.00
Port of Virginia	0.00	0.00	0.00
State	0.00	0.00	0.00
VIPA	350,000.00	350,000.00	0.00
Total Revenues	381,829.37	350,000.00	31,829.37
Total Income	381,829.37	350,000.00	31,829.37
Expense			
Operating Expenses			
Accounting	10,080.00	10,080.00	0.00
Audit & Tax	0.00	20,000.00	-20,000.00
Bank Service Charges	30.64		
Consulting Services	72,000.00	72,000.00	0.00
Dues and Subscriptions	2,902.32	3,000.00	-97.68
Insurance Expense	5,284.26	6,000.00	-715.74
Legal Fees	13,164.00	20,000.00	-6,836.00
Marketing & IT			
Domain Name	347.64		
IT/Web Hosting	8,996.01		
Marketing Projects	1,000.00		
Marketing & IT - Other	4,000.00	25,000.00	-21,000.00
Total Marketing & IT	14,343.65	25,000.00	-10,656.35
Office Supplies	1,196.23	500.00	696.23
Payroll Administrative Fees	1,085.75	2,000.00	-914.25
Telephone Expense	0.00	1,200.00	-1,200.00
Travel Expense	957.36	2,500.00	-1,542.64
Total Operating Expenses	121,044.21	162,280.00	-41,235.79
Program Expenses			
Fellowships			
Salary	19,761.84		
Hourly Wages	69,173.30		
Payroll Tax Expense	6,786.10		
Fellowships - Other	0.00	75,000.00	-75,000.00
Total Fellowships	95,721.24	75,000.00	20,721.24
Membership Expense (CHEST)	12,500.00	25,000.00	-12,500.00
Research Projects	100,000.00	75,000.00	25,000.00
Special Projects	0.00	0.00	0.00
Total Program Expenses	208,221.24	175,000.00	33,221.24
Auditing	0.00	0.00	0.00
Government Relations	0.00	0.00	0.00
Management Fees			
Apogee Strategic Partnership	0.00	0.00	0.00
Management Fees - Other	0.00	0.00	0.00
Total Management Fees	0.00	0.00	0.00
Membership Recruiting	0.00	0.00	0.00
Total Expense	329,265.45	337,280.00	-8,014.55
Net Ordinary Income	52,563.92	12,720.00	39,843.92
Net Income	**52,563.92**	**12,720.00**	**39,843.92**

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CCALS continues to hone its financial system and reports to reflect increased grant activity (including encumbering required matching dollars, tracking and issuing partner payments, and employment of CCALS Fellows). CCALS' financial report for FY2025 reflects the organization's intentional realignment of available dollars to maximize impact, and pursuit of additional funding streams.

Notes:

- Grant revenue: Grant revenue represents the closeout of multi-year engagements (including a project with the Port of Virginia). Associated activities are completed and respective payments are non-recurring.
- CHEST: CCALS received an unexpected reduction in dues paid to the Center for Hardware and Embedded Systems Security and Trust (CHEST).
- Contracted Services: In April 2025, the consulting contract for Apogee Strategic Partners, LLC was transitioned into a part-time employment arrangement for the position of CCALS Sr. Fellow.
- FY2025 financials do not reflect Tobacco Region Revitalization Commission (TRRC) grant reimbursements. Projects funded through TRRC are handled on a reimbursement basis. The two TRRC Planning grants ended 7/31/25, so repayment of grant expenses will be realized in FY2026.
- FY2025 financials reflect (most) expenses related to two TRRC planning grants initiated 1/6/25. The full period of performance for both grants concludes in July 2025.
- Audit & Tax – Timing. As of 6/30/25, CCALS was awaiting an invoice from the firm performing the financial review.

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CCALS Publications and Scholarly Impact

Publications are a central component of CCALS's mission to advance logistics and supply chain research across Virginia and beyond. Through peer-reviewed papers, technical reports, and academic collaborations, CCALS and its partners contribute to a growing body of knowledge that informs practice, policy, and innovation across interconnected logistics and supply-chain domains—including transportation, warehousing, security/resilience, manufacturing, and energy.

CCALS and its partners publish applied research that strengthens Virginia's position as a national and international leader in logistics and supply-chain innovation.

These works enhance the Commonwealth's visibility within national and international research communities, demonstrating Virginia's leadership in applied logistics, advanced manufacturing, and supply chain resilience. Collectively, they reflect the strength of CCALS's multi-university, public-private model and its commitment to advancing research that drives innovation, strengthens competitiveness, and delivers measurable impact for Virginia and its partners. See **Appendix One: Scholarly Writings and Published Research** for a list of FY25 publications.

Commitment to Commonwealth Priorities

A Catalyst for Economic Growth and Resilience in Virginia

The Commonwealth Center for Advanced Logistics Systems (CCALS) is a pivotal tool for Virginia's economic development initiatives. By leveraging its unique non-profit consortium model, CCALS brings together universities, agencies, NGOs, and industry partners to address complex logistics challenges. CCALS multiplies the impact of Commonwealth funding by:

- leveraging external resources to support its initiatives;
- enhancing Virginia's visibility through national and international collaborations and alliances;
- showcasing logistics and supply chain innovation through scholarly publications, articles, and conferences; and
- providing a ready resource to support supply chain resilience in Virginia.

Enhancing Logistics and Supply Chain Resilience

CCALS contributes significantly to strengthening Virginia's logistics sector by addressing critical supply chain vulnerabilities and optimizing transportation networks in support of, and in collaboration with, key Commonwealth logistics stakeholders, including the Port of Virginia, the Virginia Department of Aviation, and the Virginia Economic Development Partnership.

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Fostering Innovation

CCALS supports the growth of Virginia's advanced manufacturing and innovation sectors through targeted research and collaboration with industry leaders. CCALS' ability to team with organizations such as the Inland Valley Development Authority (IVDA), the UAS Center @SBD, the Virginia Tobacco Commission, and the Energy Industry, to advance the concept of an Energy-Centric UAS Center for Critical Infrastructure in the Tobacco Commission footprint, highlights CCALS' capability to attract high-growth sectors and contribute to the Commonwealth's goals related to energy and regional economic diversification and growth.

Workforce Development and Talent Attraction

CCALS's focus on workforce development is aligned with the VEDP's *"Unleash a Talented Workforce"* strategy and the Virginia Chamber's *Blueprint* priority of strengthening Virginia's talent pipeline. By providing logistics-centric training and research opportunities, CCALS addresses the need for a skilled workforce that can meet the evolving demands of Virginia's logistics and advanced manufacturing sectors. Notably, in FY2025, CCALS hosted 10 "in-house" Fellows in addition to supporting students at CCALS member institutions.

Leveraging Cross-Sector Collaboration for Greater Impact

CCALS exemplifies the "*Commonwealth Collaboration*" strategy by fostering partnerships across government, industry, and academia. The collaborative efforts with VDOT, DOAV, the Tobacco Region Revitalization Commission, and the VEDP to improve transportation resilience and logistics optimization demonstrate how CCALS is building an innovation ecosystem that not only enhances Virginia's economic competitiveness but also addresses critical infrastructure needs like broadband expansion.

Through its focus on logistics resilience, innovation, workforce development, and regional growth, CCALS plays a critical role in advancing Virginia's economic development goals. By aligning its initiatives with the strategic priorities of the Commonwealth, CCALS ensures that Virginia is well-positioned to compete on both national and global stages. These efforts provide tangible economic benefits to the Commonwealth, reinforcing its role as an indispensable asset in Virginia's economic development ecosystem.

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Appendix One: Scholarly Writings and Published Research

M.C. Marcellin, D.C. Loose, G.W. Watson, M.A. Deegan, I. Linkov, and J.H. Lambert, “Measuring System Order Disruption in an Implementation of the Resilience Matrix,” in *Proc. IEEE Resilience Week (RWS)*, 2025

D.C. Loose, M.C. Marcellin, I. Linkov, G. Pavur, M. Kitsak, M.A. Deegan, and J.H. Lambert, “Infrastructure Network Resilience Analysis with Disruptions of System Order,” in *Proc. 2025 11th Int. Conf. Control, Decision and Information Technologies (CoDIT)*, 2025

D.C. Loose, M.C. Marcellin, I. Linkov, G. Pavur, M. Kitsak, M.A. Deegan, and J.H. Lambert "Order disruption and resilience of cyber-physical systems of a metropolitan region," in *Proc. 19th Annu. IEEE Int. Syst. Conf.*, 2025

D.C. Loose, M.C. Marcellin, I. Linkov, G. Pavur, L.H. Hogewood, M.A. Deegan, and J.H. Lambert, “Stress Testing of Infrastructure Networks and System Order,” in *Proc. IEEE Resilience Week (RWS)*, 2025

Sambo, B., Sano, M., Sperotto, A., Zanetti, M., Torresan, S., Lambert, J., Linkov, I., & Critto, A. (2024). Sensitivity analysis for a participatory approach to enhance the climate resilience of Venice, Italy. *Risk Analysis, 44(7), 1573–1585.*

Moghadasi, N., Valdez, R., Piran, M., Moghaddasi, N., Linkov, I., Polmateer, T., Loose, D., & Lambert, J. (2024). Risk analysis of artificial intelligence in medicine with a multilayer concept of system order. *Systems, 12(2), 47.*

Marcellin, M., Pavur, G., Loose, D., Cardenas, J., Denehy, D., Almashhadani, M., Waheed, S., Trump, B., Polmateer, T., Linkov, I., & others (2024). Systems analysis for energy assets of Iraq influenced by water scarcity. *Environment Systems and Decisions, 44(2), 259–279.*

Davis, C., Sreekumar, S., Altman, R., Clarens, A., Lambert, J., & Colosi, L. (2024). Geospatially explicit technoeconomic assessment of sustainable aviation fuel production: A regional case study in Virginia. *Fuel Communications, 19, 100114.*

Bazemore, B., Cha, M., Goss, Z., Haywood, H., Dye, B., Gunn, M., Loose, D., Polmateer, T., Hendrickson, D., & Lambert, J. (2024). Electrification of Utility Tractors at Maritime Container Ports. In *2024 Systems and Information Engineering Design Symposium (SIEDS)* (pp. 221–226).

Pennetti, C., Marcellin, M., Pennetti, T., KottoorMadam, S., Jun, J., & Lambert, J. (2024). Connected Vehicle Data for Risk Analysis and Transportation Performance Evaluation. *Transportation Research Record, 2678(12), 1197–1208.*

De Andre, A., Marcellin, M., Pennetti, C., Jun, J., & Lambert, J. (2024). Connected Vehicle Data in Systems Analysis of Roadway Safety and Access Management. In *2024 IEEE International Systems Conference (SysCon)* (pp. 1–8).

Rebar, R., Marcellin, M., Pavur, G., Loose, D., Cardenas, J., Waheed, S., Trump, B., & Lambert, J. (2024). Systemic Risk Analysis of Agriculture with Climate and Other Stressors. In *2024 IEEE International Systems Conference (SysCon)* (pp. 1–8).

Moghadasi, N., Piran, M., Valdez, R., Moghaddasi, N., Loose, D., Polmateer, T., & Lambert, J. (2024). Systems Modeling of Trust in AI-Enabled Medical Diagnosis. In *2024 IEEE International Systems Conference (SysCon)* (pp. 1–8).

Pavur, G., Lambert, J., & Lakshmi, V. (2024). Risk Comparison of Hurricane Scenarios as Disruptions of Hydrologic Basin Order with Social Vulnerability Criteria. *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 10(3), 04024051.*

Pavur, G., Marcellin, M., Loose, D., Cardenas, J., Trump, B., Linkov, I., Waheed, S., Almashhadani, M., Polmateer, T., Lambert, J., & others (2024). Sensitivity of development goals to water scarcity of Iraq and transboundary regions. *Sustainable Horizons, 12, 100121.*

Moghadasi, N., Piran, M., Valdez, R., Baek, S., Moghaddasi, N., Polmateer, T., & Lambert, J. (2024). Process quality assurance of artificial intelligence in medical diagnosis. In *2024 International Conference on Intelligent Systems and Computer Vision (ISCV)* (pp. 1–8).

Hill Jr, R., Loose, D., Johnson, D., McKinley, S., Yusuf, J.E., Chapman, L., Polmateer, T., Ezell, B., & Lambert, J. (2024). Navigating Diverse Agency Priorities in Emergency Management: A Framework for Hazard Mitigation. *Natural Hazards Review, 25(4), 05024013.*

Marcellin, M., Pavur, G., Cardenas, J., Waheed, S., Trump, B., Linkov, I., Lakshmi, V., & Lambert, J. (2024). Risk and Systems Analysis for Renewable Power Generation with Environmental and Other Stressors. In *INCOSE International Symposium* (pp. 631–648).

Collier, Z., Sellers, E., Loose, D., Linkov, I., & Lambert, J. (2024). Security Audit Methodology for Embedded Hardware Devices. In *2024 10th International Conference on Control, Decision and Information Technologies (CoDIT)* (pp. 316–323).

Johnson, D., Marcellin, M., Pennetti, C., Wheeler, R., Clark, C., Jun, J., & Lambert, J. (2024). Connected Vehicle Data in Systems Modeling and Evaluation of Investments in Pedestrian Safety. In *2024 10th International Conference on Control, Decision and Information Technologies (CoDIT)* (pp. 1463–1468).

Johnson, D., Trump, B., Marcellin, M., Pavur, G., Loose, D., Waheed, S., Polmateer, T., Linkov, I., Lakshmi, V., Cardenas, J., & others (2024). Environmental Security and Resilience of Transportation System and Supply Chains for Iraq. In *2024 10th International Conference on Control, Decision and Information Technologies (CoDIT)* (pp. 479–485).

Loose, D., Hendrickson, D., Polmateer, T., & Lambert, J. (2024). Enterprise Resilience of a Maritime Container Port with Reinforcement Learning. In *2024 10th International Conference on Control, Decision and Information Technologies (CoDIT)* (pp. 310–315).

Pavur, G., Trump, B., Linkov, I., Polmateer, T., Lambert, J., & Lakshmi, V. (2024). Modeling Resilience of System Order for Investments in Environmental Justice and Social Vulnerability. In *2024 10th International Conference on Control, Decision and Information Technologies (CoDIT)* (pp. 1511–1517).

Wheeler, R., Miller, J., Smith, G., Lambert, J., Pennetti, C., Louis, G., & Johnson, D. (2024). Geospatial Analysis of Extreme Temperature Impacts in Agricultural Systems Using Machine Learning. In *2024 IEEE International Symposium on Systems Engineering (ISSE)* (pp. 1–8).

Lambert, J., Dorn, R., Ayyub, B., Barletta, W., Organek, J., Piras, M., Gunn, M., & Zichichi, S. (2024). Wildfire Risk Mitigation through Systems Analysis of the Planetary Emergency. *ASCE OPEN: Multidisciplinary Journal of Civil Engineering, 2(1), 04024010.*

Stavroglou, S., Pantelous, A., Ayyub, B., Lambert, J., Hall, J., & Stanley, H. (2024). A causal analytics framework for policy decisions on environmental health risks. *Available at SSRN 4526256*.

Eddy, T., VanYe, C., Li, B., Polmateer, T., Goyne, C., Friend, J., Barnes, D., Gunn, M., Linkov, I., Slutzky, D., & others (2025). Uncertainty and Sensitivity in the Development Lifecycle of Advanced Aerospace Systems. *IEEE Open Journal of Systems Engineering*.

Pavur, G., Marcellin, M., Loose, D., Cardenas, J., Trump, B., Linkov, I., Waheed, S., Almashhadani, M., Polmateer, T., Lakshmi, V., & others (2024). Systems Analysis of Water Scarcity in Transboundary Basins of Turkmenistan, Libya, and Iraq. In *AGU Fall Meeting Abstracts* (pp. H33O–1147).

Baron, C., Dueweke, J., Kendall, K., Kirk, S., Stone, W., Jabs, N., Hale, J., Gunn, M., Gunn, M., Altman, R., & others (2025). Systems Analysis and Negotiation of Strategic Partnerships in the Supply of Biofuels to Commercial Aviation. In *2025 Systems and Information Engineering Design Symposium (SIEDS)* (pp. 203–208).

Loose, D., Marcellin, M., Linkov, I., Pavur, G., Kitsak, M., Deegan, M., & Lambert, J. (2025). Order Disruption and Resilience of Cyber-Physical Systems of a Metropolitan Region. In *2025 IEEE International systems Conference (SysCon)* (pp. 1–6).

Cox Jr, L., Aven, T., Guikema, S., Haas, C., Lambert, J., Lowrie, K., Maldonado, G., & Wu, F. (2025). Can AI help authors prepare better risk science manuscripts?.

Collier, Z., Hassler, M., Lambert, J., DiMase, D., Lambert, C., & Linkov, I. (2025). Supply Chains of Computer and Electronics Hardware with Resilience to Counterfeiting and Other Disruptions. *Cyber Resilience: Applied Perspectives*, 255–276.

Almutairi, A., Alfaqeeh, F., Collier, Z., & Lambert, J. (2025). Quantifying the influence of future disruptive scenarios to priorities of energy supply chains systems of liquified petroleum gas. *International Journal of Industrial and Systems Engineering, 50(4), 555–578.*