

Intellectual Contributions

The University of Vermont

Novak, David

Refereed Journal Articles

Journal Article, Academic Journal (Accepted)

Lucas, M., Novak, D., Puranam, K. (in press). Heuristics and Sensitivity Analyses to Guide Replenishment Decisions for Blood with Random Transfer. *Decision Support Systems (DSS)*, Elsevier. <https://www.tandfonline.com/loi/tprs20>

Journal Article, Academic Journal (Published)

Choi, Tom Y., Narayanan, Sriram, D. C., Olhager, Jan, Sheu, Jiuh-Biing, Wiengarten, Frank (2021). MANAGING EXTENDED SUPPLY CHAINS. *Journal of Business Logistics (JBL)* / Wiley. <https://onlinelibrary.wiley.com/journal/21581592>

Journal Article, Academic Journal (Published)

Novak, D., Wu, Z., Dooley, K. Whose Resilience Matters? Addressing Issues of Scale in Supply Chain Resilience. *Journal of Business Logistics (JBL)* / Wiley. <https://onlinelibrary.wiley.com/journal/21581592>

Journal Article, Academic Journal (Published)

Novak, D., Sullivan, J., Sentoff, K., Dowds, J. (2020). A Framework to Guide Strategic Disinvestment in Roadway Infrastructure Considering Social Vulnerability. *Transportation Research Part A: Policy and Practice - Elsevier*, 132(February 2020), 436-451. <https://www.journals.elsevier.com/transportation-research-part-a-policy-and-practice>

Journal Article, Academic Journal (Published)

Sullivan, J., Dowds, J., Novak, D., Scott, D., Ragsdale, C. (2019). Development and Application of an Iterative Heuristic for Roadway Snow and Ice Control. *Transportation Research Part A: Policy and Practice*, 127(July), 18-31.

Journal Article, Academic Journal (Published)

Novak, D., Sullivan, J., Reed, J., Gagulic, M., Van Den Berg, N. (2018). Performance Related Specification and Payment Modifiers in Highway Construction Projects. *International Journal of Quality & Reliability Management - Emerald*, 35(10), 2348-2372. <https://www.emeraldinsight.com/doi/pdfplus/10.1108/IJQRM-03-2018-0061>

Journal Article, Academic Journal (Published)

Do, H., Shunko, M., Lucas, M., Novak, D. (2018). Impact of Behavioral Factors on Performance of Multi-Server Queueing Systems. *Production and Operations Management*. [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1937-5956](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1937-5956)

Journal Article, Academic Journal (Published)

Puranam, K., Novak, D., Lucas, M., Fung, M. (2017). Managing Blood Inventory with Multiple Independent Sources of Supply. *European Journal of Operational Research (EJOR)*, 259, 500-511. <http://dx.doi.org/10.1016/j.ejor.2016.11.005>

Journal Article, Academic Journal (Published)

Puranam, K., Novak, D., Lucas, M. (2015). Extending the Newsvendor Model to Account for Uncontrolled Inventory Transfers. *Annals of Operations Research / Springer*(DOI 10.1007/s10479-015-2080-5), 14. <http://link.springer.com/article/10.1007/s10479-015-2080-5>

Journal Article, Academic Journal (Published)

Novak, D., Koliba, C., Zia, A., Tucker, M. (2015). Evaluating the Outcomes Associated with an Innovative Change in a State-level Transportation Project Prioritization Process: A Case Study of Vermont. *Transport Policy*, 42, 130-143.
<http://www.journals.elsevier.com/transport-policy/>

Journal Article, Academic Journal (Published)

Novak, D., Choi, T. (2015). The Role of Geography in Shaping SCM's Professional Identity. *Journal of Business Logistics*, 36(2), 231-232.
[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)2158-1592](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)2158-1592)

Journal Article, Academic Journal (Published)

Sullivan, J., Dowds, J., Novak, D., Scott, D. (2015). Strategic Location of Satellite Salt Facilities for Roadway Snow and Ice Control. *Transportation Research Record*(No. 2482). <http://trrjournalonline.trb.org/doi/pdf/10.3141/2482-05>

Journal Article, Academic Journal (Published)

Novak, D., Sullivan, J. L. (2014). A Link-Focused Methodology for Evaluating Accessibility to Emergency Services. *Decision Support Systems (DSS)*, Elsevier, 57.
<http://www.journals.elsevier.com/decision-support-systems/>

Journal Article, Academic Journal (Published)

Novak, D., Sullivan, J. L., Scott, D. M. (2012). A Network-based Approach for Evaluating and Ranking Transportation Roadway Projects. *Applied Geography*, Elsevier, 34(May 2012), 498-506. <http://www.sciencedirect.com/science/article/pii/S0143622812000124>

Journal Article, Academic Journal (Published)

Novak, D., zz-Hodgdon, C. D., Aultman-Hall, L. (2011). Nationwide Freight Generation Models: A Spatial Regression Approach. *Networks and Spatial Economics*, 11(1), 23-42.
<http://www.springerlink.com/content/an2mx454g47u8155/fulltext.pdf>

Journal Article, Academic Journal (Published)

zz-Kraushaar, J. M., Novak, D. (2010). Examining the Affects of Student Multitasking with Laptops During the Lecture. *Journal of Information Systems Education*, 21(2), 241-251.
<http://jise.org/Issues/21/vol21-2-pg241.pdf>

Journal Article, Academic Journal (Published)

Novak, D. (2010). Internet Access and Capacity Planning: Quantifying Relationships between Usage, Capacity, and Blocking. *Telecommunications Policy*, 34(5-6), 309-322.

Journal Article, Academic Journal (Published)

Sullivan, J. L., Novak, D., Aultman-Hall, L., Scott, D. M. (2010). Identifying Critical Road Segments and Measuring System-Wide Robustness in Transportation Networks with Isolating Links: A Link-Based Capacity-Reduction Approach. *Transportation Research Part A: Policy and Practice*, 44(5), 323-336.

Journal Article, Academic Journal (Published)

Sullivan, J. L., Aultman-Hall, L., Novak, D. (2009). A Review of Current Practice in Network Disruption Analysis and an Assessment of the Ability to Account for Isolating Links in Transportation Networks. *Transportation Letters: The International Journal of Transportation Research /J. Ross Publishing*, 1(4), 271-280.

Journal Article, Academic Journal (Published)

Novak, D. (2008). Managing Bandwidth Allocations Between Competing Recreational and Non-Recreational Traffic on Campus Networks. *Decision Support Systems*, 45(2), 338-353.

Journal Article, Academic Journal (Published)

Nair, S., Novak, D. (2007). A Traffic Shaping Model for Optimizing Network Operations. *European Journal of Operational Research*, 180(3), 1358-1380.

Journal Article, Academic Journal (Published)

Scott, D., Novak, D., Aultman-Hall, L., Guo, F. (2006). Network Robustness Index: A New Method For Identifying Critical Links and Evaluating the Performance of Transportation Networks. *Journal of Transport Geography*, 14(3), 215-227.

Journal Article, Academic Journal (Published)

Novak, D., Rowland, D., DaSilva, L. (2003). Modeling Dialup Internet Access: An Examination of User-to-Modem Ratios, Blocking Probability, and Capacity Planning in a Modem Pool. *Computers & Operations Research*, 30(13), 1959-1976.

Journal Article, Academic Journal (Published)

Novak, D., Ragsdale, C. (2003). A Decision Support Methodology for Stochastic Multi-Criteria Linear Programming Using Spreadsheets. *Decision Support Systems*, 36(1), 99-116.

Non-Refereed Journal Articles

Journal Article, Public or Trade Journal (Published)

Lucas, M., Novak, D., Puranam, K. (2018). On the Challenges of Blood Inventory Management. *Archives of Blood Transfusion & Disorders - Crimson Publishers*, 1(4), 2. <https://crimsonpublishers.com/abtd/pdf/ABTD.000520.pdf>

Conference Proceedings

Conference Proceeding (Published)

zz-Kraushaar, J. M., Chittenden, T., Novak, D. (2008). *A Descriptive Study of Perceived and Actual Tablet PC Use by Undergraduate Students in a Traditional Lecture-based Graphical Modeling Class* (vol. 2008, pp. 81-88). Indiana: The Impact of Tablet PCs and Pen-based Technology on Education, Purdue University Press. <http://www.thepress.purdue.edu/impactoftabletpc2008.html>

Conference Proceeding (Published)

zz-Kraushaar, J. M., Chittenden, T., Novak, D., Chittenden, N. B. (2007). *A Preliminary Profile of Student Tablet Use During the Lecture* (vol. Web Page). Atlanta, Georgia: 2007 EDUCAUSE Southeast Regional Conference. <http://connect.educause.edu/library/abstract/APreliminaryProfileo/44612>

Conference Proceeding (Published)

Novak, D., Kitchin, P. (2004). *An Automated Statistical Quality Control Process for Internet Service Providers*. Annual Meeting of the Southeast Decision Sciences Institute (SEDSI).

Conference Proceeding (Published)

Novak, D., Chang, S. J., Nair, S. K. (2003). *Setting Optimal Bandwidth Controls for Peer-to-Peer Traffic on Campus Networks*. Annual Meeting of the Northeast Decision Sciences Institute (NEDSI).

Conference Proceeding (Published)

Novak, D., Rakes, T. (2001). *A Characterization of Online Modem Pool Traffic*. National Decision Sciences Institute meeting.

Conference Proceeding (Published)

Novak, D., DaSilva, L., Rowland, D. (2000). *Modem Pool Simulation and Performance Analysis*. Society for Computer Simulation Symposium for Performance Evaluation of Computer and Telecommunications Systems (SPECTS).

Conference Proceeding (Published)

Novak, D. (1999). *A Methodology for Solving Stochastic Programming Problems Using Microsoft's Excel* (pp. First Place in the Student Paper Competition). Annual Meeting of the Southeast Institute for Ops. Res. & the Mgmt Sciences (INFORMS).

Other Intellectual Contributions

Technical Report (Accepted)

Sullivan, J., Novak, D., Aultman-Hall, L. (2012). *Identifying Network Representation Issues with the Network Trip Robustness* (TRC Report #12-004 ed., pp. 18 pages). Washington, District Of Columbia: Transportation Research Board.
<http://trid.trb.org/view.aspx?id=1142122>

Technical Report (Accepted)

Sullivan, J., Aultman-Hall, L., Novak, D. (2010). *Application of the Network Robustness Index to Identifying Critical Road-Network Links in Chittenden County, Vermont* (vol. TRC#10-009, pp. 21 pages). Transportation Research Center.
http://www.uvm.edu/~transctr/research/trc_reports/UVM-TRC-10-009.pdf

Technical Report (Accepted)

Novak, D., Sullivan, J., Aultman-Hall, L. (2010). *Advanced Development and Calibration of the Network Robustness Index to Identify Critical Road Network Links* (TRC Report #10-019 ed.). Burlington, Vermont: University of Vermont Transportation Research Center (TRC).

Research Report (Published)

Novak, D., Sullivan, J. L., Niles, M. (2021). Targeted Investment for Food Access. *Summary results from NCST grant, Targeted Investment for Food Access* (pp. 28). Research Report for the National Center for Sustainable Transportation, UC Davis.
<https://ncst.ucdavis.edu/research-product/targeted-investment-food-access>

Technical Report (Published)

Dowds, J., Sullivan, J., Scott, D., Novak, D. *Optimization of Snow Removal in Vermont* (pp. 37). UVM Transportation Research Center, RAC Project Report.

Material Regarding New Courses/Curricula (Published)

zz-Kraushaar, J. M., Novak, D., Chittenden, T. (2006). *Curriculum Redesign of Junior/Senior Course: Management Information Systems*. School of Business Administration.
<http://www.uvm.edu/~tabletpc/?Page=141rd.html>