

## Curriculum Vitae

**FRANK P. DOUMA**  
**Room 257 HHHSPA**  
**301 19th Avenue South**  
**Minneapolis, MN 55455**  
**(612) 626-9946**  
**douma002@umn.edu**

<https://www.hhh.umn.edu/directory/frank-douma>

### Education

JD, University of Minnesota.	May 1996
MA, University of Minnesota. Public Affairs	November 1995
Thesis Title: The United States and Uniform Safety Standards in International Air Transportation	
BA, Grinnell College, Grinnell, IA. Political Science, Concentration in Russian and Eastern European Studies	May 1992
Phi Beta Kappa	

### Licensures and Certifications

#### *Certifications*

Attorney, State Bar of Wisconsin. (License Number: 1027889)	October 1996 - July 31, 2023
---	------------------------------

### Academic Appointments

Institute for Urban and Regional Infrastructure Finance Hubert H. Humphrey School of Public Affairs, University of Minnesota: Director of State & Local Policy and Outreach Direct State and Local Policy research and outreach for IURIF. Manage transportation policy research projects. Identify new research opportunities, develop scopes of work, draft, edit and present reports.	2021 - Present
State and Local Policy Program Hubert Humphrey School of Public Affairs, University of Minnesota: Research Fellow and Director Direct State and Local Policy Program. Manage transportation policy research projects. Develop scopes of work, drafted, edited and presented reports. Identify and propose new research opportunities and assist program director in increasing program visibility and strategic planning. Supervise program administrative staff.	2015 - 2021
State and Local Policy Program Hubert H. Humphrey School of Public Affairs, University of Minnesota: Research Fellow and Associate Director Project manager for transportation policy research projects. Develop scopes of work, drafted, edited and presented reports. Identify and propose new research opportunities and assist program director in increasing program visibility and strategic planning. Supervise program administrative staff.	2005 - 2015

State and Local Policy Program  
Humphrey School of Public Affairs, University of Minnesota: Research Fellow 1999 - 2005  
Project manager for transportation policy research projects related to telecommunications, Global Positioning Systems, wireless technology travel behavior, corridor planning, and sustainability. Developed scopes of work, drafted, edited and presented reports.

State and Local Policy Program  
Hubert H. Humphrey School of Public Affairs, University of Minnesota: Research Assistant 1993 - 1995  
Gathered and analyzed data, coordinated conferences and drafted reports for transportation studies on Intelligent Transportation Systems and Congestion Pricing.

### **Other Professional Positions**

Canadian Pacific Railway  
Project Analyst 1998 - 1999  
Trained in many aspects of railroad operations and marketing. Performed economic analysis for major investments. Aided in coordination of grain marketing and operations.

Minnesota Department of Transportation  
Telework Program Specialist 1996 - 1998  
Project Manager for Telework Center Operational Test. Promoted telework in numerous ways, including conducting telework training for Mn/DOT employees. Developed Web page for B-BOP coalition and planned B-BOP Day event.

Metropolitan Airports Commission  
Legal Intern 1995 - 1996  
Researched, reported and recommended solutions to various legal issues before the Commission, including air safety, airport leases, and Commission business practices.

Ashford Borough Council Planning Office  
Intern 1991  
Researched and reported on anticipated impacts of completion of English Channel Tunnel and 1992 European Union reforms.

### **Current Membership in Professional Organizations**

Co-chair, Transportation Research Board 2016 - Present  
Task Force on Data Privacy, Security and Protection Policy (ABJ55T)

Transportation Research Board 2012 - 2021  
Member of Emerging Technology Law Committee (AL040)

State Bar of Wisconsin October 1996 - Present

### **RESEARCH, SCHOLARSHIP, AND CREATIVE WORK**

#### **Grants, Contract, Awards: External Sources**

1. **Award: Transportation Equity Training for MnDOT**  
Principal Investigator: Douma, Frank P.  
Status: Accepted  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: Contract 1036342 WO 34  
Award Dates: March 3, 2022 - July 31, 2023
2. **Award: FY22-23 CTS Operations**  
Status: Accepted  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 1036342WO31  
Award Dates: July 7, 2021 - June 30, 2023
3. **Award: Enhancing Managed Lane Equity Analysis**  
Principal Investigator: Lari, Adeel Z.  
Status: Accepted  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 1036342 Work Order 15  
Award Dates: June 15, 2021 - April 30, 2023
4. **Award: Maximizing Transportation Assets by Building Community Connection Through Innovative Development of Rights of Way and Airspace**  
Principal Investigator: Douma, Frank P.  
Status: Accepted  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 1036342 Work Order 22  
Award Dates: June 10, 2021 - September 30, 2022
5. **Award: Parking FlexPass at ABC Ramps: Integrating Parking and Transit Options for Sustainable Mobility**  
Principal Investigator: Fan, Yingling  
Status: Accepted  
Sponsoring Organization: MN METROPOLITAN COUNCIL  
Sponsoring Organization Reference ID: SG-2019-009  
Award Dates: October 1, 2019 - September 30, 2022
6. **Award: SCC: Leveraging Autonomous Shared Vehicles for Greater Community Health, Equity, Livability, and Prosperity (HELP)**  
Principal Investigator: Zhang, Zhi-Li  
Status: Accepted  
Sponsoring Organization: THE NATIONAL SCIENCE FOUNDATION  
Sponsoring Organization Reference ID: 1831140  
Award Dates: September 15, 2018 - August 31, 2022
7. **Award: S&CC-IRG Track 1: Connecting the Smart-City Paradigm with a Sustainable Urban Infrastructure Systems Framework to Advance Equity in Communities**  
Principal Investigator: Shekhar, Shashi  
Status: Accepted  
Sponsoring Organization: THE NATIONAL SCIENCE FOUNDATION

Sponsoring Organization Reference ID: CNS - 1737633 Amendment Number 002  
Award Dates: September 1, 2017 - August 31, 2022

8. **Award: Analysis for Metro Climate Stats Program**  
Principal Investigator: Douma, Frank P.  
Status: Accepted  
Sponsoring Organization: MN METROPOLITAN COUNCIL  
Sponsoring Organization Reference ID: Met Council Contract # 18P429  
Award Dates: December 17, 2019 - December 31, 2021
9. **Award: Minnesota Distance Based User Fee Demonstration**  
Principal Investigator: Douma, Frank P.  
Status: Accepted  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 1003325 WO 121  
Award Dates: July 15, 2019 - December 31, 2021
10. **Award: Fiscal Year 2020-2021 CTS Operations**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: Contract 1003325 Work Order 124  
Award Dates: July 9, 2019 - June 30, 2021
11. **Award: Impact of Decline in Volunteerism on Rural Transit Systems**  
Principal Investigator: Douma, Frank P.  
Status: Accepted  
Sponsoring Organization: AECOM, INC  
Sponsoring Organization Reference ID: SUB0001438 / NCHRP 20-65 Task 78  
Award Dates: December 15, 2020 - May 31, 2021
12. **Award: Understanding Manufacturers' Perspectives on Transportation in MnDOT District 3: An Industry Cluster Approach**  
Principal Investigator: Munnich, Lee W.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract 1003325 Work Order 130  
Award Dates: November 7, 2019 - July 31, 2020
13. **Award: Improve Access to Waiver Transportation Used by Minnesota's Home and Community-Based Program Participants**  
Principal Investigator: Zhao, Zhirong  
Status: Closed  
Sponsoring Organization: NAVIGANT CONSULTING, INC.  
Award Dates: May 30, 2018 - May 29, 2020
14. **Award: FTA Section 5310 Enhanced Transportation for Seniors and Individuals with Disabilities grant program award: Hennepin County Human Services Transportation Assessment**  
Status: Closed  
Sponsoring Organization: HENNEPIN COUNTY  
Sponsoring Organization Reference ID: A188951, Work Order UM0319, PO 376637

Award Dates: April 1, 2019 - February 28, 2020

15. **Award: Roadway Safety Institute**  
Principal Investigator: Donath, Max  
Status: Closed  
Sponsoring Organization: US DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: DTRT13-G-UTC35 Modification 2  
Award Dates: September 30, 2013 - October 1, 2019
16. **Award: FY19 Administrative Support for the Minnesota Freight Advisory Committee**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: Contract 1003325 WO 91  
Award Dates: August 23, 2018 - August 31, 2019
17. **Award: Understanding Manufacturers Perspectives on Transportation in MnDOT District 3: An Industry Cluster Approach**  
Principal Investigator: Munnich, Lee W.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 1003325/WO 116  
Award Dates: April 27, 2019 - June 30, 2019
18. **Award: FY19 MCOTA Outreach Support**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: Contract 1003325 WO 89  
Award Dates: October 3, 2018 - June 30, 2019
19. **Award: FY18-19 CTS Operations**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: Contract 1003325 WO 44  
Award Dates: June 26, 2017 - June 30, 2019
20. **Award: Support for Pre-Deployment Activities for a Minnesota User-Based Fee Demonstration**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract No 1003325 W.O. 38  
Award Dates: May 15, 2017 - June 30, 2019
21. **Award: Understanding District 2 Manufacturers' Perspectives on Transportation: An Industry Cluster Approach**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract No 99008 WO #210  
Award Dates: July 13, 2015 - June 30, 2019

22. **Award: eWorkPlace Phase III**  
Principal Investigator: Lari, Adeel Z.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract 1003325 WO #16  
Award Dates: March 9, 2017 - February 28, 2019
23. **Award: ABC Ramps Transportation Options**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract 1003325 WO 6, AMD 1  
Award Dates: October 28, 2016 - February 28, 2019
24. **Award: eWorkPlace Phase III**  
Principal Investigator: Lari, Adeel Z.  
Status: Accepted  
Sponsoring Organization: MN METROPOLITAN COUNCIL  
Sponsoring Organization Reference ID: SG-2016-007  
Award Dates: October 1, 2016 - February 1, 2019
25. **Award: FY18-19 MCOTA Outreach Support**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: Contract 1003325 WO 43  
Award Dates: October 20, 2017 - August 31, 2018
26. **Award: Shared Mobility Governance**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: THE MCKNIGHT FOUNDATION  
Sponsoring Organization Reference ID: Contract #1052  
Award Dates: September 1, 2017 - June 30, 2018
27. **Award: Analysis of I-405 Traffic Data and Performance Measures, and Recommendations to Improve Corridor Performance**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: WASHINGTON STATE DEPT. OF TRANSPORTATION  
Sponsoring Organization Reference ID: WS-JTC-UMN  
Award Dates: June 12, 2017 - March 31, 2018
28. **Award: Volunteer Driver Programs in Minnesota: Benefits and Barriers**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Minnesota Council on Transportation Access (MCOTA)  
Award Dates: 2017 - 2018
29. **Award: FY17 MCOTA Outreach Support**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION

Sponsoring Organization Reference ID: Contract 1003325, WO 5  
Award Dates: October 5, 2016 - August 31, 2017

30. **Award: ITS Program Legislative Research and Analysis Task 2.0 and Task 2.c**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: INSTITUTE OF TRANSPORTATION ENGINEERS  
Sponsoring Organization Reference ID: DTFH61-13-D-00026 TO 6  
Award Dates: September 28, 2015 - June 30, 2017
31. **Award: Center for Transportation Studies Operations-FY2016-2017**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 99008 W.O. 211  
Award Dates: July 10, 2015 - June 30, 2017
32. **Award: eWorkPlace**  
Principal Investigator: Lari, Adeel Z.  
Status: Closed  
Sponsoring Organization: MN METROPOLITAN COUNCIL  
Sponsoring Organization Reference ID: SG-2014-077 / MPO 8592 RPO 199018  
Award Dates: January 7, 2015 - December 31, 2016
33. **Award: Summer Training: developing and implementing plans that are equitable**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN METROPOLITAN COUNCIL  
Sponsoring Organization Reference ID: Met Council Master Contract 141072B; WO  
Award Dates: May 1, 2016 - September 30, 2016
34. **Award: DARTS Mobility Management Evaluation**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: DARTS  
Award Dates: October 1, 2014 - September 30, 2016
35. **Award: Minnesota Council on Transportation Access Outreach Support**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 99008 W.O. 218  
Award Dates: September 22, 2015 - June 30, 2016
36. **Award: ITS Program Legislative Research and Analysis**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: INSTITUTE OF TRANSPORTATION ENGINEERS  
Sponsoring Organization Reference ID: ITE-15-01  
Award Dates: February 10, 2015 - April 15, 2016
37. **Award: Impact of Exempting the Recording of Low Level Speed Violations in Minnesota**

Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Minnesota Department of Transportation  
Award Dates: 2015 - 2016

38. **Award: FY14 Minnesota Council on Transportation Access Support**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 99008 W.O. 137 Amendment 3  
Award Dates: December 3, 2013 - August 31, 2015
39. **Award: Impacts of Changes to Minnesota Law Exempting Low Level Speed Violations from Driving Records [MnDOT Project ID: Impact of Exempting Low Level Speed Violations ]**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDot Contract 99008 W.O. 138  
Award Dates: November 22, 2013 - July 31, 2015
40. **Award: I-35E MnPASS Extension Community Outreach and Education Study**  
Principal Investigator: Munnich, Lee W.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract No 99008 WO No. 114  
Award Dates: May 23, 2013 - July 31, 2015
41. **Award: Understanding District 4 Manufacturers??? Perspectives on Transportation: An Industry Cluster Approach**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract No. 99008, W.O. No. 171  
Award Dates: September 18, 2014 - May 31, 2015
42. **Award: SmartTrAC: A Smartphone Solution for Context-Aware Travel and Activity Capturing**  
Principal Investigator: Fan, Yingling  
Status: Closed  
Sponsoring Organization: US DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: DTRT57-13-C-10034  
Award Dates: June 14, 2013 - February 15, 2015
43. **Award: Identifying and Reconciling Stakeholder Perspectives in Deploying Automated Speed Enforcement**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: University of Minnesota (United States Department of Transportation)  
Award Dates: 2014 - 2015



44. **Award: Understanding and Enhancing the Value of Freight Economy in Minnesota**  
Principal Investigator: Munnich, Lee W.  
Status: Closed  
Sponsoring Organization: BNSF RAILWAY COMPANY  
Award Dates: December 1, 2012 - November 30, 2014
45. **Award: Multimodalism for Small Cities**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDot Contract 99008 W.O. 38  
Award Dates: September 11, 2012 - November 30, 2014
46. **Award: FY14 Administrative Support for the Minnesota Freight Advisory Committee**  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 99008 W.O. 130  
Award Dates: August 13, 2013 - September 30, 2014
47. **Award: Primary Seat Belt Evaluation Follow-up Study**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF PUBLIC SAFETY  
Sponsoring Organization Reference ID: 72296  
Award Dates: January 3, 2014 - May 31, 2014
48. **Award: Human Services Research and Transportation Planning**  
Status: Closed  
Sponsoring Organization: DAKOTA COUNTY  
Award Dates: September 11, 2013 - February 28, 2014
49. **Award: Minnesota Field Test of CrashHelp**  
Principal Investigator: Munnich, Lee W.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: Contract No. 99008, W.O. No. 58  
Award Dates: May 14, 2012 - January 31, 2014
50. **Award: Understanding District 8 Manufacturer's Perspectives on Transportation: An Industry Cluster Approach**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract #99008 Work Order #86  
Award Dates: January 18, 2013 - December 31, 2013
51. **Award: NEMT Coordinators in Minnesota: A Survey of How Minnesota Counties Use Coordinators to Deliver Non-Emergency Medical Transportation**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Minnesota Council on Transportation Access (MCOTA)  
Award Dates: 2013 - 2014

52. **Award: Transportation Policy and Economic Competitiveness**

Project Investigators: Douma, Frank Peter  
Sponsoring Organization: State of Minnesota  
Award Dates: 2013 - Present

In its 2013 session, the Minnesota Legislature directed the Minnesota Department of Transportation (MnDOT) to fund research at the University of Minnesota's Center for Transportation Studies on transportation policy and economic competitiveness, including, but not limited to, innovative transportation finance options and economic development, transportation impacts of industry clusters and freight, and transportation technology impacts on economic competitiveness. This workplan continues to implement that directive. Now in its 3rd year, the overall focus continues to be on investigating how innovations in transportation can contribute to economic competitiveness. The Program engages in research, outreach and other related activities that investigate how innovative transportation finance, industry clusters and transportation technologies affect economic competitiveness.

53. **Award: Vehicle Sharing Among Human Service Providers in Minnesota: Steps to Address Barriers**

Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Minnesota Council on Transportation Access (MCOTA)  
Award Dates: 2013 - 2014

Increased vehicle sharing among transportation-service providers in Minnesota has long been identified as an opportunity to reduce costs and increase efficiency, particularly for those organizations providing transportation services to older adults, people with disabilities, and individuals with lower incomes. However, this opportunity remains largely unrealized in Minnesota due to several obstacles. This research project looks at two of the principal obstacles: (i) the vehicle insurance market; and (ii) compliance with motor carrier regulations. The research examines the nature of these obstacles in Minnesota, and how these same obstacles have been overcome in other states that have successful vehicle-sharing systems. Particular attention is given to the policy and legal frameworks that other states have adopted to facilitate and encourage vehicle sharing. The research also examines several case studies in Minnesota where vehicle sharing does occur to inform this analysis. The objective of the research is to identify concrete steps that policy makers in Minnesota can take to increase vehicle-sharing and make it a more integral part of the larger transportation system.

54. **Award: Minnesota Council on Transportation Access (MCOTA) Support, FY13**

Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 99008 W.O. 79 Amendment 1  
Award Dates: November 20, 2012 - October 31, 2013

55. **Award: University Transportation Centers**

Principal Investigator: Donath, Max  
Status: Closed  
Sponsoring Organization: US DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: DTRT06-G-0013, Mod 5  
Award Dates: August 23, 2006 - March 31, 2013

56. **Award: Identifying Issues Related to Deployment of Automated Speed Enforcement**

Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: MnDOT Contract No. 00848  
Award Dates: April 30, 2012 - June 30, 2012

57. **Award: Assessment of Mn/DOT's Strategic Highway Research Program (SHRP2) Project C-18: Pilot Test the Collaborative Decision Making Framework**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 89261 W.O. 232  
Award Dates: October 14, 2010 - June 30, 2012.
58. **Award: Impacts of Minnesota's Primary Seat Belt Law**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: Minnesota Department of Public Safety  
Sponsoring Organization Reference ID: Contract No. 38180  
Award Dates: January 3, 2012 - March 28, 2012
59. **Award: Innovative Parking Pricing Demonstration Project - Phase II**  
Principal Investigator: Lari, Adeel Z.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 89261 W.O. 170  
Award Dates: August 13, 2009 - December 31, 2011
60. **Award: Itasca County Area Transportation Study, Phase II**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: Blandin Foundation  
Award Dates: April 15, 2011 - November 15, 2011
61. **Award: Itasca County Area Transportation Study**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: BLANDIN FOUNDATION  
Sponsoring Organization Reference ID: G2009-0282  
Award Dates: July 1, 2009 - May 1, 2010.
62. **Award: Substitution between E-shopping and Travel: Evidence from the Twin Cities-FY09 Tech Plan**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: University of Minnesota (United States Department of Transportation)  
Award Dates: 2008 - 2009
63. **Award: Impact of Bicycle Facilities on Commute Mode Share**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 89261 W.O.#29 Amend2  
Award Dates: July 17, 2006 - November 30, 2008
64. **Award: Improving Car-Sharing and Transit Service with ITS**

Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: 89261 W.O.#33 Amend #1  
Award Dates: December 15, 2006 - September 30, 2008

65. **Award: Transportation Equity Act for the 21st Century (TEA 21)**  
Principal Investigator: Donath, Max  
Status: Closed  
Sponsoring Organization: US DEPARTMENT OF TRANSPORTATION  
Sponsoring Organization Reference ID: USDOT/DTRS98-G-0011  
Award Dates: June 9, 1998 - September 30, 2008
66. **Award: Telework Synthesis Project**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: CESSI ACCESSIBLE SOLUTIONS  
Sponsoring Organization Reference ID: GS-10F-0006M/T.O. UMN--001  
Award Dates: December 15, 2007 - September 24, 2008
67. **Award: The Implications of Current and Emerging Privacy Law for ITS - FY08 TechPlan**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: University of Minnesota (United States Department of Transportation)  
Award Dates: 2007 - 2008
68. **Award: Telework/Telecommuting Pilot Research**  
Principal Investigator: Douma, Frank P.  
Status: Closed  
Sponsoring Organization: MIDWEST INSTITUTE FOR TELECOMM  
Award Dates: October 1, 2004 - December 31, 2007
69. **Award: Examining the Success of Bus Only Shoulder Lanes**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Hennepin County  
Award Dates: 2006 - 2007
70. **Award: Impact of Bicycle Facilities on Commute Mode Share**  
Project Investigators: Douma, Frank Peter  
Sponsoring Organization: Minnesota Department of Transportation  
Award Dates: 2006
71. **Award: Developing ITS to Serve Diverse Populations**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Minnesota Department of Transportation  
Award Dates: 2004 - 2005

72. **Award: Telework as a Return to Work Strategy**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: United States Department of Labor  
Award Dates: 2004 - 2007
73. **Award: In-Depth Examination of Urban Corridor Development**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Hennepin County, Minnesota  
Award Dates: 2003 - 2004
74. **Award: Using ITS to Better Serve Diverse Populations**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Minnesota Department of Transportation  
Award Dates: 2003 - 2004
75. **Award: Telecommunications and Sustainable Transportation**  
Project Investigators: Douma, Frank Peter  
Status: Funded  
Sponsoring Organization: Minnesota Department of Transportation  
Award Dates: 2001 - 2002

**Pending/Submitted:**

1. **Proposal: City of White Bear Lake AV Shuttle Pilot**  
Role: Principal  
Proposal ID: CON00000093087  
Status: In Process  
Sponsoring Organization: AECOM, INC  
Date Submitted: April 15, 2021  
Purpose: Other Sponsored Activity
2. **Proposal: The Grand Iron Range CAV Initiative Data and Research Support**  
Role: Co-Investigator  
Proposal ID: CON00000099023  
Status: Submitted  
Sponsoring Organization: MN DEPARTMENT OF TRANSPORTATION  
Date Submitted: April 4, 2022  
Purpose: Other Sponsored Activity
3. **Proposal: Transitioning Fuel Tax Assessments to a Road Usage Charge**  
Role: Principal  
Proposal ID: CON00000091821  
Status: Submitted  
Sponsoring Organization: WSP, INC  
Date Submitted: February 16, 2021  
Purpose: Other Sponsored Activity

## Publications

Asterisk(\*) - indicates co-senior author

Underline - indicates student author

### **Peer-Reviewed Journal Article**

1. Emory, K., **Douma, F.**, & Cao, J. (2022). Autonomous vehicle policies with equity implications: Patterns and gaps. *Transportation Research Interdisciplinary Perspectives*, 13, 100521.
2. Wu, X., Cao, J., & **Douma, F.** (2021). The impacts of vehicle automation on transport-disadvantaged people. *Transportation Research Interdisciplinary Perspectives*, 11, 100447.
3. Wu, X., **Douma, F.**, Cao, J., & Shepard, E. (2020). Preparing Transit in the Advent of Automated Vehicles: A Focus-Group Study in the Twin Cities. *Findings*.
4. Hauf, A., & **Douma, F.** (2019). Governing Dockless Bike Share: Early Lessons for Nice Ride Minnesota. *Transportation Research Record*, 2673(9), 419--429.
5. **Douma, F.**, & Petersen, E. (2019). Scenarios and Justification for Automated Vehicle Demonstration in Rural Minnesota. *Center for Transportation Studies, University of Minnesota*.
6. **Douma, F.**, Cao, J., Corcoran, H., Fan, Y., Lari, A., Rohde, B., . . . Karner, K. (2019). The ABC Parking Ramps in Minneapolis: A Unique Past. A Visionary Future. *Minnesota Department of Transportation*.
7. **Douma, F.**, & Alarcon, F. Toward Greater Understanding of the Relationship between Public Perceptions of Speed, Speed Laws, and Safety. *Journal of Transportation Law, Logistics and Policy*. [Accepted:2018]
8. **Douma, F.**, & Alarcon, F. (2018). Toward Greater Understanding of the Relationship between Public Perceptions of Speed, Speed Laws, and Safety. *Center for Transportation Studies, University of Minnesota*.
9. Peterson, C., **Douma, F.**, & Morris, N. (2017). Addressing key concerns regarding automated speed enforcement via interactive survey. *Transportation Research Record: Journal of the Transportation Research Board*(2660), 66--73.
10. Munnich, L., & **Douma, F.** (2017). Obtaining manufacturers' perspectives in making regional transportation decisions. *Community Development*, 48(2), 240--254.
11. **Douma, F.** (2017). Volunteer Driver Programs in Minnesota: Benefits and Barriers. *Minnesota Council on Transportation Access*.
12. **Douma, F.**, Peck, S., Tilahun, N., Minnesota, V. I., & Tilahun, F. D. N. (2015). 4. Title and Subtitle 5. Report Date Impact of Exempting the Recording of Low Level Speed.
13. Fatehi, L., & **Douma, F.** (2015). Autonomous Vehicles: The Legal and Policy Road Ahead. *Minn. J.L. Sci. & Tech.*, 16, 615--617.
14. **Douma, F.**, Tilahun, N., & Spencer, P. (2015). Impact of exempting the recording of low level speed violations in Minnesota. *Center for Transportation Studies, University of Minnesota*.
15. **Douma, F.** (2015). Interstate 35E MnPASS Managed Lanes Extension: Little Canada Road to County Road 96 Pre-Implementation Study. *Center for Transportation Studies, University of*

*Minnesota.*

16. Fatehi, L., **Douma, F.**, Glancy, D. J., Stanley, K. D., Lari, A., Onyiah, I., . . . others (2015). LAW, SCIENCE & TECHNOLOGY.
17. Stanley, K. D., Partridge, E., & **Douma, F.** (2015). Legal Accelerators and Brakes for Deployment of Automated Vehicles. *Road Vehicle Automation 2*, Springer, Cham, 93--104.
18. Lari, A., **Douma, F.**, & Onyiah, I. (2015). Self-driving vehicles and policy implications: current status of autonomous vehicle development and Minnesota policy implications. *Minn. JL Sci. & Tech.*, 16, 735.
19. Peck, S., Fatehi, L., **Douma, F.**, & Lari, A. (2015). The SDVs Are Coming! An Examination of Minnesota Laws in Preparation for Self-Driving Vehicles. *Minn. JL Sci. & Tech.*, 16, 843.
20. Mathison, A., Baas, G., Cowan, J., **Douma, F.**, Narvaez, G., & Garry, T. (2014). Dakota County Human Services Research and Transportation Planning: Strategic Action Plan. *Center for Transportation Studies, University of Minnesota.*
21. Lari, A., **Douma, F.**, Yang, K. L., Caskey, K., & Cureton, C. (2014). Innovative Parking Pricing Demonstration in the Twin Cities: Introducing Flexibility and Incentives to Parking Contracts. *Center for Transportation Studies, University of Minnesota.*
22. **Douma, F.**, Munnich, L., & Garry, T. (2014). Options for automated speed enforcement pilot projects in Minnesota work and school zones. *Center for Transportation Studies, University of Minnesota.*
23. Lari, A., **Douma, F.**, & Onyiah, I. (2014). Self-driving vehicles: current status of autonomous vehicle development and Minnesota policy implications. *Preliminary white paper, University of Minnesota*, 1--20.
24. Garry, T., **Douma, F.**, & Simon, S. (2013). Intelligent Transportation systems: Personal data needs and privacy law. *Transp. LJ*, 39, 97.
25. **Douma, F.**, & Garry, T. (2013). NEMT Coordinators in Minnesota.
26. On, M. C., **Douma, F.**, & Garry, T. (2013). NEMT Coordinators in Minnesota: A Survey of How Minnesota Counties Use Coordinators to Deliver Non-Emergency Medical Transportation Prepared by.
27. **Douma, F.**, & Garry, T. (2013). Vehicle Sharing Among Human Service Providers in Minnesota: Steps to Address Barriers.
28. **Douma, F.**, & Palodichuk, S. A. (2012). Criminal liability issues created by autonomous vehicles. *Santa Clara L. Rev.*, 52, 1157.
29. Munnich, L. W., **Douma, F.**, Qin, X., Thorpe, J. D., & Wang, K. (2012). Evaluating Effectiveness of States' Toward-Zero-Deaths Programs. *Center for Excellence in Rural Safety, University of Minnesota, Minneapolis.*
30. **Douma, F.**, Munnich, L., Loveland, J., & Garry, T. (2012). Identifying issues related to deployment of automated speed enforcement. *Intelligent Transportation Systems Institute, Center for Transportation Studies, University of Minnesota.*
31. **Douma, F.**, & Tilahun, N. (2012). Impacts of Minnesota's Primary Seat Belt Law. *Center for Excellence in Rural Safety, University of Minnesota.*
32. **Douma, F.**, Garry, T., & Simon, S. (2012). ITS Personal Data Needs: How Much Do We Really Need to Know? *Intelligent Transportation Systems Institute, Center for Transportation Studies, University of Minnesota.*

33. Fan, Y., Chen, Q., Liao, C.-F., & **Douma, F.** (2012). Smartphone-based travel experience sampling and behavior intervention among young adults. *Intelligent Transportation Systems Institute, Center for Transportation Studies, University of Minnesota.*
34. Cao, X. J., Xu, Z., & **Douma, F.** (2012). The interactions between e-shopping and traditional in-store shopping: an application of structural equations model. *Transportation, 39(5)*, 957--974.
35. Xu, Z., & **Douma, F.** (2012). The Interactions between E-Shopping and Traditional In-Store Shopping: An Application of Structure Equations Model.
36. **Douma, F.**, & Aue, S. (2011). ITS and locational privacy: Suggestions for peaceful coexistence. *Journal of Transportation Law, Logistics, and Policy, 78(2)*, 89.
37. Cao, X., Xu, Z., & **Douma, F.** (2011). The Interactions between E-Shopping and Traditional Shopping: An Application of Structure Equations Model. *Transportation Research.*
38. Cao, X., **Douma, F.**, & Cleaveland, F. (2010). Influence of E-Shopping on Shopping Travel: Evidence from Minnesota's Twin Cities. *Transportation Research Record: Journal of the Transportation Research Board(2157)*, 147--154.
39. Cao, J., **Douma, F.**, Cleaveland, F., & Xu, Z. (2010). The Interactions between E-shopping and store shopping: a case study of the Twin cities.
40. **Douma, F.**, Fan, Y., Robinson, F., Baas, G., Cureton, C., & Schmit, M. (2009). Itasca County area transportation study. *University of Minnesota Center for Transportation Studies.*
41. **Douma, F.**, & Deckenbach, J. (2009). The Challenge of ITS for the Law of Privacy. *U. Ill. JL Tech. & Poly*, 295.
42. **Douma, F.**, Poindexter, G., & Frooman, S. (2008). Bus-Only Shoulders in the Twin Cities Metropolitan Area, Minnesota. *Transportation Research Record: Journal of the Transportation Research Board(2072)*, 41--48.
43. **Douma, F.**, Gaug, R., Horan, T., & Schooley, B. (2008). Improving Carsharing and Transit Service with ITS. *Minnesota Department of Transportation.*
44. Munnich, L., **Douma, F.**, & others (2008). Places and Networks: The Changing Landscape of Transportation and Technology. *Center for Transportation Studies, University of Minnesota.*
45. Bolan, R. S., Munnich, Jr, L. W., Krizek, K. J., Horan, T. A., Levinson, D., Berndt, M., . . . others (2008). Places and Networks: The Changing Landscape of Transportation and Technology Final Summary Report of the STAR--TEA 21 Project. *Contract (C), 2009041(2009042), 2009043--2009045.*
46. Berndt, M., Bolan, R. S., Burkhard, R., **Douma, F.**, Duncan, C., Handy, S. L., . . . others (2008). Places and Networks: The Changing Landscape of Transportation and Technology Final Summary Report of the STAR--TEA 21 Project. *University of Minnesota Center for Transportation Studies.*
47. **Douma, F.**, & Cleaveland, F. (2008). The impact of bicycling facilities on commute mode share. *Minnesota Department of Transportation.*
48. **Douma, F.**, & Deckenbach, J. (2008). The Implications of Current and Emerging Privacy Law for ITS. *University of Minnesota Center for Transportation Studies.*
49. Zmud, J., Bradley, M., **Douma, F.**, & Simek, C. (2007). Attitudes and willingness to pay for tolled facilities: a panel survey evaluation. *Transportation Research Record: Journal of the Transportation Research Board(1996)*, 58--65.



50. **Douma, F.** (2007). Bus-only shoulders in the Twin Cities. *University of Minnesota/USDOT, June*.
51. **Douma, F.** (2006). Solo and ensemble: for a price, single-passenger cars can enjoy the Express Lane in Minnesota. *Transportation Management & Engineering, 11(3)*.
52. Guo, Y., & **Douma, F.** (2004). INTELLIGENT TRANSPORTATION SYSTEMS AND OTHER TECHNOLOGICAL ASSISTANCE USED IN MINNESOTA COMMUNITY-BASED TRANSPORTATION.
53. **Douma, F.** (2003). Telecommunications for Sustainable Transportation.
54. Munnich, L., & **Douma, F.** (2002). Transportation Technologies for Sustainable Communities.
55. Wells, K., **Douma, F.**, Loimer, H., Olson, L., & Pansing, C. (2001). Telecommuting implications for travel behavior: case studies from Minnesota. *Transportation Research Record: Journal of the Transportation Research Board(1752)*, 148--156.

### **Book Chapter**

1. Munnich, L., **Douma, F.**, & Loveland, J. (2018). The public acceptability of road pricing—a US case study. *Road Pricing: Technologies, Economics and Acceptability* 125. London: Institution of Engineering and Technology.
2. Nguyen, N., Munnich, L., & **Douma, F.** (2015). Closing the Gap in Rural and Urban Road Deaths. Hughes, D. (Ed.), *Transportation Issues, Policies and R&D: Road and Traffic Safety: Practices, Role of Human Behavior and Effective Programs* vol. 4, 1-22. New York Chapter: Nova Science Publishers.

### **Law Review**

1. **Douma, F.**, Lari, A., & Andersen, K. (2017). *The Legal Obligations, Obstacles, and Opportunities for Automated and Connected Vehicles to Improve Mobility and Access for People Unable to Drive* 1st ed., vol. 2017, 75. Michigan State Law Review.
2. **Douma, F.**, & Hedblom, M. K. (2001). *Wireless Communication Applications for Transportation: User Boon or Booby Trap?* 4th ed., vol. 27, 6. William Mitchell Law Review.
1. **Douma, F.**, & Tilahun, N. Y. (2014). *Impact of Minnesota's Primary Seat Belt Law: An Evaluation Update*. Center for Transportation Studies, University of Minnesota.
2. **Douma, F.**, & Kriz, K. A. (2003). *Transportation Corridor Planning: a Model and Case studies*. Online] Humphrey School of public affairs, University of Minnesota Available at: <http://www.hhh.umn.edu/img/assets/8460/CBPTRBpaperFinalr2.pdf> [Accessed in August, 2012].

### **Case Review**

1. Douma, F., & Hauf, A. (2018). *Governing Dockless Bike Share: Early Lessons for Nice Ride Minnesota*. Center for Transportation Studies, University of Minnesota. <http://www.cts.umn.edu/Research/ProjectDetail.html?id=2019023>

### **Conference Proceeding**

1. Nguyen, N. P., Munnich, L. W., & **Douma, F.** (2014). Closing the Gap in Rural and Urban Road Deaths. *Transportation Research Board 93rd Annual Meeting* 14-3917 ed..
2. Fan, Y., Chen, Q., Liao, C.-F., & **Douma, F.** (2013). UbiActive: A smartphone-based tool for trip detection and travel-related physical activity assessment. *TRB 92nd Annual Meeting*

*Compendium of Papers, Transportation Research Board, TRB 2013 Annual Meeting.*

3. **Douma, F.**, & Gaug, R. (2009). Carsharing in the Twin Cities: Measuring impacts on travel behavior and automobile ownership. *Transportation Research Board 88th Annual Meeting* 09-0446 ed..
4. Cleaveland, F., & **Douma, F.** (2009). The impact of bicycling facilities on commute mode share. *88th Annual Meeting of the Transportation Research Board, Washington, DC.*
5. **Douma, F.**, Frooman, S., & Deckenbach, J. (2008). What You Need to Know--and Not Know: Current and Emerging Privacy Law for Intelligent Transportation Systems. *Transportation Research Board 87th Annual Meeting* 08-1857 ed..
6. Zmud, J., Bradley, M., **Douma, F.**, & Simek, C. (2007). Panel Survey Evaluation of Attitudes and Willingness to Pay for Tolled Facilities. *Transportation Research Board Annual Meeting.*
7. Zmud, J. P., Peterson, S., & **Douma, F.** (2007). Preliminary Before and After Results of I-394 HOT Lane Panel Survey. *Transportation Research Board 86th Annual Meeting* 07-0048 ed..
8. **Douma, F.**, & Andrew, J. (2006). Developing a Model for Car Sharing Potential in Twin Cities Neighborhoods. *Transportation Research Board 85th Annual Meeting* 06-2449 ed..
9. Andrew, J., & **Douma, F.** (2006). Developing a model for carsharing potential in Twin Cities neighbourhoods. *Compendium of Papers for the 85th Annual Meeting of the Transportation Research Board, Washington DC, January 22--26.*
10. Zmud, J. P., **Douma, F.**, & Patterson, T. (2006). Pricing Comes to Minnesota: Baseline Attitudinal Evaluation of the I-394 HOT Lane Project. *Transportation Research Board 85th Annual Meeting* 06-2486 ed..
11. **Douma, F.**, & Wilson, S. (2006). Transportation Needs of Foreign-Born Ethnic Subpopulations in Rural and Urban Communities: Environmental Justice Perspective. *Transportation Research Board 85th Annual Meeting* 06-2422 ed..
12. **Douma, F.**, Zmud, J., & Patterson, T. (2005). Pricing Comes to Minnesota: Attitudinal Evaluation of I-394 HOT Lane Project. *Transportation Research Board Annual Meeting.*
13. **Douma, F.**, Wells, K., Horan, T. A., & Krizek, K. J. (2004). ICT and travel in the twin cities metropolitan area: enacted patterns between Internet use and working and shopping trips. *Proceedings CD-ROM of the 83rd Annual Meeting of the Transportation Research Board, Washington DC.*
14. Hedblom, M. K., & **Douma, F.** (2004). ITS OPPORTUNITIES RESULTING FROM DEVELOPMENTS IN HOME BROADBAND TELECOMMUNICATIONS. *At the Crossroads: Integrating Mobility Safety and Security. ITS America 2004, 14th Annual Meeting and Exposition ITS America.*
15. **Douma, F.**, Wells, K., Horan, T., & Krizek, K. (2003). ICT and travel in the twin cities Metropolitan area: enacted patterns between internet use and working and shopping trips. *The Proceedings of the 83rd Annual Meeting of the Transportation Research Board (CD-ROM) in Washington DC.*
16. **Douma, F.**, Hedblom, M. K., & Dadabayeva, N. (2002). REGULATION OF SAFETY AND PRIVACY ISSUES IN WIRELESS COMMUNICATION APPLICATIONS FOR TRANSPORTATION. *ITS America 12th Annual Meeting and Exposition: Securing Our Future.*
17. Munnich, L., DeCramer, G., Campbell, C., Rohde, B., Van Hattum, D., & **Douma, F.** (1995). INSTITUTIONAL AND POLITICAL ISSUES IN CONGESTION PRICING: NEW

MODELS FOR FEDERAL, STATE, AND LOCAL COOPERATION IN INFRASTRUCTURE INVESTMENT. *Intelligent Transportation: Serving the User Through Deployment. Proceedings of the 1995 Annual Meeting of ITS America.*

18. Munnich, L., DeCramer, G., Campbell, C., Rohde, B., Van Hattum, D., & **Douma, F.** (1995). IVHS AND THE ENVIRONMENT: NEW MODELS FOR FEDERAL, STATE, AND LOCAL COOPERATION IN URBAN AREAS. *Intelligent Transportation: Serving the User Through Deployment. Proceedings of the 1995 Annual Meeting of ITS America.*
19. Munnich, L., Campbell, C., DeCramer, G., Rohde, B., **Douma, F.**, & Van Hattum, D. (1994). IVHS AND THE ENVIRONMENT: NEW MODELS FOR FEDERAL, STATE AND LOCAL COOPERATION IN THE APPLICATION OF ADVANCED TRANSPORTATION SYSTEMS FOR ENVIRONMENTAL IMPROVEMENT IN URBAN AREAS. *Moving Toward Deployment. Proceedings of the IVHS America Annual Meeting. 2 Volumes Volume 2 ed.*

### **Technical Report**

1. Wu, X., Douma, F., & Cao, J. (2019). *Challenges and Opportunities of Autonomous Vehicles to Urban Planning: Investigation into Transit and Parking.*
2. Noble, C., & Douma, F. (2018). *Best Practices for Addressing Youth Employment and Training Transportation.* Minnesota Council on Transportation Access. <http://cts.umn.edu/Publications/ResearchReports/pdfdownload.pl?id=2922>
3. Peterson, C., **Douma, F.**, & Morris, N. (2017). *Identifying and Reconciling Stakeholder Perspectives in Deploying Automated Speed Enforcement.* Center for Transportation Studies, University of Minnesota.
4. Lari, A., **Douma, F.**, Caskey, K., Yang, K. L., & Cureton, C. (2012). *Innovative Parking Pricing Demonstration: Introducing Flexibility and Incentives to Parking Contracts.*

### **Webinar**

1. Douma, F. P. (2017). *Policy and Planning Opportunities of Self-Driving Vehicles.*

### **Invited Presentations, Posters, and Exhibits**

Underline - indicates student presenter

### **Keynote/Plenary Address**

1. **Douma, F.** "Transportation Sharing: Market-Based Policy Change," Minnesota Higher Education Bike Forum: Micro-Mobility in Minnesota University of Minnesota, Minneapolis, Minnesota, United States. (January 15, 2019). *Invited.*
2. Handy, S., (Keynote/Plenary Speaker), **Douma, F. P., (Panelist)**, Erkel, J., (Panelist), Monson, K., (Panelist), Sexton, T., (Panelist) "The Future of Driving in the Land of Freeways,". (November 1, 2018). *Invited.*

### **Closing remarks**

1. **Douma, F. P.** "Closing remarks at "Minnesota's Stake in Plug-in Hybrid Electric Vehicles",", St. Paul, Minnesota. (January 18, 2007). *Invited.*

### **Demonstration**

1. Lari, A., **Douma, F. P.** "Policy Implications for Self-Driving Vehicles," St. Cloud Area Planning Organization, Waite Park, Minnesota. (May 10, 2018). *Invited.*  
URL: <http://www.stcloudapo.org/policy-board.html>

Audience size: 15

Describe the audience: local officials, planning commissioners, members of the public

2. **Douma, F. P.** "Policy Implications of Self-Driving Vehicles," League of Minnesota Cities Improving Local Economies Policy Committee meeting, St. Paul, Minnesota. (August 2017). *Invited.*

URL: <https://www.lmc.org/page/1/improving-local-economies.jsp>

Audience size: 30

Describe the audience: High level city staff and elected officials

3. **Douma, F. P.** "Self-Driving Vehicles - Legal and Insurance Issues," Regional Council of Mayors, Minneapolis, Minnesota. (December 12, 2016). *Invited.*

URL: [http://minnesota.uli.org/wp-content/uploads/sites/31/2016/12/RCM\\_2016.12.12.pdf](http://minnesota.uli.org/wp-content/uploads/sites/31/2016/12/RCM_2016.12.12.pdf)

Audience size: 35

Describe the audience: Twin Cities Metro Area mayors and staff

### ***Didactic Seminar***

1. **Douma, F. P.** "Transportation Sharing: Market-Based Policy Change," Research Workshop on the Sharing Economy University of Minnesota, Minneapolis, Minnesota, United States. (November 3, 2017). *Invited. Peer-reviewed/refereed.*

URL: <http://sharingeconomy.umn.edu/events/workshop/2017/index.html>

Audience size: 50

Describe the audience: academic

### ***Funding workshop***

1. **Douma, F. P.** "Automated Vehicles and Transportation Finance: A "Choose Your Own Adventure" Discussion," Minnesota Transportation Funding Workshop Minnesota Transportation Alliance, St. Paul, Minnesota. (September 11, 2018). *Invited.*

Audience size: 70

Describe the audience: Transportation funding stakeholders and decision makers

### ***Lecture***

1. **Douma, F. P.** "Policy Implications for Self-Driving Vehicles," Grinnell Mutual Insurance, Grinnell, Iowa. (April 24, 2018). *Invited.*

Audience size: 85

Describe the audience: Insurance professionals

2. **Douma, F. P.** "Policy Implications for Self-Driving Vehicles," White Bear Lake Chamber of Commerce, Maplewood, Minnesota. (January 16, 2018). *Invited.*

Audience size: 80

Describe the audience: Chamber of Commerce members, Legislators

3. **Douma, F. P.** "Policy Implications of Self-Driving Vehicles," La Rive Condominium Lecture Series, Minneapolis, Minnesota. (March 10, 2017). *Invited.*

Audience size: 25

Describe the audience: Academics, politicians, interested citizens

### ***Legislative Testimony***

1. **Douma, F. P., (Presenter)** "Connected and Automated Vehicles (CAV's)," Committee Hearing Minnesota House of Representatives Transportation Finance and Policy Committee, St Paul, Minnesota, United States. (January 19, 2021). *Invited. Peer-reviewed/refereed.*

URL: <https://www.house.leg.state.mn.us/committees/minutes/92028/88643>

Legislative testimony on current state to CAV development and deployment

### ***Luncheon***

1. **Douma, F. P.** "Autonomous Vehicles," White Bear Area Chamber of Commerce White Bear Area

Chamber of Commerce, White Bear Lake, Minnesota. (August 1, 2018). *Invited*.  
URL: [http://www.presspubs.com/white\\_bear/news/article\\_554d41ca-9b21-11e8-b0f5-575ef694cfa1.html](http://www.presspubs.com/white_bear/news/article_554d41ca-9b21-11e8-b0f5-575ef694cfa1.html)  
Audience size: 20  
Describe the audience: Local business leaders

### ***Luncheon Presentation***

1. **Douma, F. P.,** Lari, A. "Policy Implications of Self-Driving Vehicles," BOMA September General Meeting. (September 21, 2017). *Invited*.  
URL: <http://www.bomampls.org/education-events/calendar/september-general-meeting/>  
Audience size: 50  
Describe the audience: Building Owners and Managers of Minneapolis

### ***Podium***

1. **Douma, F. P., (Author & Presenter)** "Moving Freight That Last Mile -- And Then the First One!," 2019 CTS Annual Transportation Research Conference University of Minnesota Center for Transportation Studies, Minneapolis, Minnesota, United States. (November 7, 2019). *Invited. Peer-reviewed/refereed*.  
URL: [https://cts.prd.umn.edu/sites/cts.umn.edu/files/2020-07/5\\_douma.pdf](https://cts.prd.umn.edu/sites/cts.umn.edu/files/2020-07/5_douma.pdf)  
Study of current trends in meeting the needs of moving freight the "first mile" (from shippers to warehouses or distribution centers) and "last mile" (to the end users).
2. **Douma, F. P., (Presenter)** "Policy and Legal Opportunities and Obstacles for Connected and Automated Vehicles: Lessons from South of the Border?," Vehicle Technology International Conference Red River College, Winnipeg, Canada. (October 1, 2019). *Invited. Peer-reviewed/refereed*.  
URL: <https://www.rrc.ca/ar/2019/10/10/vehicle-technology-international-conference-presentations-available-for-download/>  
A policy level discussion of the obstacles and opportunities related to development and deployment of connected and automated vehicles.
3. **Douma, F. P., (Presenter)** "Legal and Policy Issues in Transportation Data Privacy," Conference on Wireless Communications in Transit Global Mass Transit, Washington, District of Columbia, United States. (June 18, 2019). *Invited. Peer-reviewed/refereed*.  
URL: <https://www.globalmasstransit.net/archive.php?id=34753>  
Provided a synopsis of the evolving state of legal regulation of data privacy in transportation
4. **Douma, F. P., (Author & Presenter), Dame, R., (Author & Presenter)** "ABC Parking Ramps: Reimagining the Future of Parking and Multimodal Transportation Choices," University of Minnesota Center for Transportation Studies Annual Research Conference University of Minnesota Center for Transportation Studies, Minneapolis, Minnesota, United States. (November 1, 2018). *Invited*.  
URL: <http://www.cts.umn.edu/events/conference/2018>
5. **Douma, F. P.** "How Planning for Self-Driving Vehicle Technology Can Help All People," 2017 Fall Forum ITS Minnesota, Bloomington, Minnesota, United States. (October 17, 2017). *Invited. Peer-reviewed/refereed*.  
URL: <http://www.itsmn.org/events/2017/8/7/j96ll11xklueac5bl2rhixjzr5r0ge>  
Audience size: 100  
Describe the audience: Transportation Professionals
6. **Douma, F. P.** "Minnesota User Based Fee Demonstration: Pre-Implementation Plan," Automated Vehicle Symposium AUVSI and TRB, San Francisco, California, United States. (July 12, 2017). *Invited. Peer-reviewed/refereed*.  
URL: <http://www.automatedvehiclessymposium.org/program/proceedings>

7. **Douma, F., (Moderator)**, Fisher, T. R., (Author & Presenter), Eddy, J., (Speaker) "Driverless Cars, Compelling Impacts," Minnesota's Transportation Conference Minnesota Department of Transportation, St Paul, Minnesota, United States. (March 1, 2017). *Invited. Peer-reviewed/refereed.*

URL: <http://mntransportationconference.org/program/>

Audience size: 150

Describe the audience: Transportation practitioners

#### **Presentation to State Senate Committee**

1. **Douma, F.** "A Look at Future Transportation Technology and Policy," Minnesota State Senate Transportation Committee Minnesota State Senate, St Paul, Minnesota, United States. (January 16, 2019). *Invited.*

URL: [http://mnsenate.granicus.com/player/clip/3107?view\\_id=1](http://mnsenate.granicus.com/player/clip/3107?view_id=1)

Presentation to State Senate Committee regarding changes in transportation technologies and what it means for transportation policy, financy and related items.

#### **Presentation/Talk**

1. **Douma, F. P., (Author & Presenter)** "Identifying Issues Related to Deploying Automatic Enforcement in Minnesota," Meeting of the Work Zone Speed Management Study Task Force Minnesota Work Zone Speed Management Study Task Force, Minneapolis, Minnesota, United States. (September 30, 2021). *Invited. Peer-reviewed/refereed.*
2. **Douma, F. P., (Presenter)** "CAEV's (and relations) in Real Life: Ensuring Benefits to Society," Autonomous, Connected and Electrified Mobility Systems: Modeling, Control, and Deployment Institute of Electrical and Electronics Engineers. (September 19, 2021). *Invited. Peer-reviewed/refereed.*

Presentation summarizing research performed on Automated Enforcement between 2013 and 2017.

URL: <https://www.tue.nl/en/our-university/calendar-and-events/19-09-2021-autonomous-connected-and-electrified-mobility-systems-modeling-control-and-deployment/>

Virtual conference

CAEV's In Real Life: Considerations for Ensuring Benefits to Society: Connected Autonomous and Electrified Vehicles (CAEV's) and their self-driving / driverless cousins (CAV's, ACES, SAEV's etc) all have been described as "disruptive" technologies, bearing the potential of challenging any and all current assumptions about how we move ourselves and our stuff from point "A" to point "B." However, ensuring that deployment of these technologies will give us the chance to challenge those assumptions, and that the ensuing deployment choices we make actually bring societal benefits, will depend upon understanding the current policy and legal landscape that shapes our current transportation system, and understanding which policy changes are most likely to create the incentives for the "best" deployment scenarios. Frank will provide a high-level overview of some of the current transportation planning and policy challenges we face in the current system, and suggest some opportunities where changes to those policies will open the door for beneficial deployment of self-driving vehicles. Find here the presentation.

3. **Douma, F. P., (Speaker)** "Identifying Issues Related to Deploying Automatic Enforcement in Minnesota," Meeting of Minnesota Towards Zero Deaths Automated Speed Enforcement Subcommittee Minnesota Towards Zero Deaths Automated Speed Enforcement Subcommittee, Minneapolis, Minnesota, United States. (September 7, 2021). *Invited. Peer-reviewed/refereed.*  
Presentation summarizing my research on Automated Speed Enforcement. The subcommittee then discussed some potential options for work for this group
4. **Douma, F. P., (Panelist)** "Policymaking," PA 8511 Guest Speaker University of Minnesota, Minneapolis, Minnesota, United States. (June 24, 2021). *Invited. Peer-reviewed/refereed.*
5. **Douma, F. P., (Moderator)** "New Amtrak Chicago - Twin Cities Service," Transportation Research Forum Lunch & Learn Transportation Research Forum, United States. (March 4, 2021). *Invited. Peer-reviewed/refereed.*

6. **Douma, F. P., (Presenter)**, Lari, A., (Presenter) "Telecommuting Impacts of COVID-19: What Will Be The New Normal?," Sustaining Your Local Economy In Turbulent Times: A Webinar Series University of Minnesota Extension Center for Community Vitality, Minnesota, United States. (December 17, 2020). *Invited. Peer-reviewed/refereed.*  
URL: <https://extension.umn.edu/courses-and-events/sustaining-your-local-economy-turbulent-times#telecommuting-impacts-of-covid-19%3A-what-will-be-the-new-normal%3F-2659817>
7. **Douma, F. P., (Panelist)** "Opportunities and Implications of Widespread Telecommuting," Disrupting the Transportation Sector: Opportunities to Reduce Emissions and Increase Equity Minnesota Environmental Initiative, Minneapolis, Minnesota, United States. (December 11, 2020). *Invited. Peer-reviewed/refereed.*  
URL: <https://www.youtube.com/watch?v=6nRwRdB0YrM>
8. **Douma, F. P., (Speaker)** "Self-Driving (Connected and Automated) Vehicles," Adult Education Program Bethlehem Lutheran Church, Minneapolis, Minnesota, United States. (November 17, 2020). *Invited. Peer-reviewed/refereed.*
9. **Douma, F. P., (Presenter)** "Identifying Issues Related to Deploying Automatic Enforcement in Minnesota (summarizing work from 2013 - 2017)," Automated Traffic Enforcement Technical Advisory Committee City of Minneapolis, Minneapolis, Minnesota, United States. (October 29, 2020). *Invited. Peer-reviewed/refereed.*
10. **Douma, F. P., (Presenter)** "An Equity-Driven CAV Demonstration," 2020 MAASTO CAV e-Summit Mid-America Association of State Transportation Officials (MAASTO) Committee on Connected and Automated Vehicles. (October 22, 2020). *Invited. Peer-reviewed/refereed.*  
Summary of Research that led to the planning of an AV shuttle serving senior and low income users
11. **Douma, F. P., (Presenter)**, Lari, A., (Presenter) "Telework Best Practices: Impacts on Transportation, the Environment, & the Workplace," Greenstep Webinar Clean Energy Resource Teams, St Paul, Minnesota, United States. (May 18, 2020). *Invited. Peer-reviewed/refereed.*
12. **Douma, F. P., (Presenter)** "Connected and Automated Vehicles (CAV): Multimodal Options," MnDOT Multimodal Research Council MnDOT Multimodal Research Council, St Paul, Minnesota, United States. (April 29, 2020). *Invited. Peer-reviewed/refereed.*  
A presentation focused on connected and automated vehicles within the context of Minnesota's transportation system. The talk and breakout discussion focused on: (1) Opportunities and possible deployment models for AVs that might support transit in Greater Minnesota; (2) AV interaction with active transportation users; and (3) how AV's, the sharing economy and mobility hubs work in Greater Minnesota regional centers
13. **Douma, F. P., (Speaker)** "Minnesota's Transportation Future: How New Technologies and other Innovations will Affect Competitiveness," Chapter meeting Financial Planning Association of Minnesota, Golden Valley, Minnesota, United States. (February 18, 2020). *Invited. Peer-reviewed/refereed.*  
Minnesota's transportation infrastructure, while always critical for supporting a vibrant economy, will soon change in ways that were barely imagined, let alone implemented, in recent memory. While safety and reliability remain the cornerstones of the system, the methods of achieving these goals will be quite different. The presentation covered several recent studies that showed how new methods of analysis and technological innovations are driving this change, and the implications of these changes for Minnesota's economy. Some of the most obvious changes will be in how freight is delivered, but other impacts include how the infrastructure is paid for, and who uses it. The latter category included key opportunities in workforce and equity consideration.
14. **Douma, F. P., (Visiting Professor)** "Transportation Sharing: Market-Based Policy Change," Guest lecture University of Minnesota, Minneapolis, Minnesota, United States. (November 26, 2019). *Invited. Peer-reviewed/refereed.*
15. **Douma, F. P., (Speaker)** "The Future of Transportation: It's Probably Not What You Think," Guest

speaker Clear Springs Elementary School, Minnetonka, Minnesota, United States. (November 20, 2019). *Invited. Peer-reviewed/refereed.*

16. **Douma, F. P.** "The Future of Transportation: How Can Policy Help Ensure Everyone Benefits?," HUP Brown Bag Hennepin University Partnership, Minneapolis, Minnesota, United States. (September 5, 2019). *Invited. Peer-reviewed/refereed.*
17. **Douma, F. P., (Keynote/Plenary Speaker)** "The Future of the Commute," Monthly Education Event 3M Bicycle User Group, Maplewood, Minnesota, United States. (July 31, 2019). *Invited. Peer-reviewed/refereed.*  
A discussion of how changes in transportation technologies will impact other modes, including bicycles
18. **Douma, F. P., (Panelist)** "National and State Data Privacy," Twin Cities Shared Mobility Data Seminar and Workshop Twin Cities Shared Mobility Collaborative, Minneapolis, Minnesota, United States. (July 11, 2019). *Invited. Peer-reviewed/refereed.*  
URL:  
<https://static1.squarespace.com/static/5d8a78b7362c255660b38364/t/5dd2d3862e1e1821e3259938/1574097867593/SMCdatasummary.pdf>  
A discussion of the status of regulations surrounding data privacy in the United States, including risks to data collection and sharing broadly
19. **Douma, F. P., (Author & Presenter)** "The Future of the Commute (and more!)," 2019 Spring Corporate Bike Forum Bicycle Alliance of Minnesota, St Paul, Minnesota, United States. (May 22, 2019). *Invited. Peer-reviewed/refereed.*  
URL: <http://www.bikemn.org/component/events/event/778>  
Presentation discussing how changes in transportation technology will impact parking, bicycle safety and related issues
20. **Douma, F. P., (Speaker)** "Sample of University of Minnesota Transportation Research," Energy Efficiency Innovation Seminar Series German American Chamber of Commerce, Minneapolis, Minnesota, United States. (November 5, 2018). *Invited.*  
URL: <http://www.cts.umn.edu/publications/catalyst/2018/december/german>
21. **Douma, F. P.** "Implications of Automated and Connected Vehicles," Minnesota Metropolitan Planning Organization Annual Conference Minnesota Metropolitan Planning Organization, Minnesota. (August 9, 2018). *Invited.*  
Audience Size: 15  
Describe the audience: MPO Planners
22. **Douma, F. P., Dossett, B.** "The Future of Transportation: It's Probably Not What You Think," MnDOT Managers Conference MnDOT, St. Cloud, Minnesota. (June 19, 2018). *Invited.*  
Audience size: 120  
Describe the audience: MnDOT Managers
23. **Douma, F.** "Volunteer Driver Programs in MinnesotaL Benefits and Barriers," 2018 Minnesota Volunteer Driver Program Forum Minnesota Council on Transportation Access, St Paul, Minnesota, United States. (May 9, 2018). *Invited.*  
URL: <http://www.coordinatemntransit.org/events/volunteerdriverforum/>
24. **Douma, F. P.** "Examining the Relationship Between Speed Enforcement Laws and Safety," Traffic Engineering Organization MnDOT, Arden Hills, Minnesota, United States. (March 27, 2018). *Invited.*
25. **Douma, F. P.** "Policy Implications of Self Driving Vehicles," General Meeting Minneapolis Building Owners and Managers Association, Minneapolis, Minnesota, United States. (September 21, 2017). *Invited. Peer-reviewed/refereed.*  
URL: <http://www.bomampls.org/education-events/calendar/september-general-meeting/>



26. **Douma, F.** "Policy Implications of Self Driving Vehicles," Improving Local Economies Policy Committee League of Minnesota Cities, St Paul, Minnesota, United States. (August 2017). *Invited. Peer-reviewed/refereed.*  
URL: <https://www.lmc.org/page/1/improving-local-economies.jsp>
27. **Douma, F., Andersen, K.** "Policy Implications of Self Driving Vehicles," Noon Lunch Forum St Paul Community, St Paul, Minnesota, United States. (April 14, 2017). *Invited. Peer-reviewed/refereed.*
28. **Douma, F.** "Self-Driving Vehicles: Equity Issues," Monthly Meeting Minnesota Council on Transportation Access, St Paul, Minnesota. (March 22, 2017). *Invited. Peer-reviewed/refereed.*  
Audience size: 15  
Describe the audience: government agency representatives
29. **Douma, F., (Presenter),** Lari, A., (Other) "Broadband Needs for Transportation," Task Force Meeting Governor's Broadband Task Force, St Paul, Minnesota, United States. (March 22, 2017). *Invited. Peer-reviewed/refereed.*  
URL: <https://mn.gov/deed/programs-services/broadband/task-force/>  
Audience size: 20  
Describe the audience: Government officials and trade representatives
30. **Douma, F. P., (Speaker), Andersen, K., (Speaker)** "Driverless Revolution: Will Self-Driving Cars Reshape Our Cities?," Urban Currents The Cunningham Group, Minneapolis, Minnesota, United States. (February 21, 2017). *Invited. Peer-reviewed/refereed.*  
URL: <http://www.cunningham.com/category/urban-currents/>  
Audience size: 30  
Describe the audience: architects, planners and interested citizens
31. **Douma, F. P.** "Changing Transit for a Changing Population in Greater Minnesota," MnDOT Transit Conference, St. Cloud, Minnesota. (June 14, 2016). *Invited.*
32. **Douma, F. P.** "Minnesota's Transportation Challenges," Osher Lifelong Learning Institute, Golden Valley, Minnesota. (October 12, 2015). *Invited.*
33. **Douma, F. P.** "The Importance of Freight Transportation to Minnesota's Economy," Golden Valley, Minnesota. (October 12, 2015). *Invited.*
34. **Douma, F. P.** "Self-Driving Vehicles: Opportunities for Transportation Policy and Planning," Minnesota Congressional Staff, Minneapolis, Minnesota. (October 8, 2015). *Invited.*
35. **Douma, F. P.** "Transportation Policy," Goodwill Easter Seals Luncheon series, St. Paul, Minnesota. (April 20, 2015). *Invited.*
36. **Douma, F. P.** "Minnesota Innovative Parking Pricing Demonstration," Contemporary Tools and Approaches for Parking Pricing and Management Workshop, Minneapolis, Minnesota. (March 6, 2015). *Invited.*
37. **Douma, F. P.** "Is Privacy Still the Boogeyman? The Safeguards Being Considered and Debated," MBUFA Second Annual National Conference, Washington, District of Columbia. (February 24, 2015). *Invited.*
38. **Douma, F. P.** "Self-Driving Vehicles: Opportunities for Minnesota Policy and Law," City Engineers Association of Minnesota 2015 Annual Conference, Brooklyn Park, Minnesota. (January 29, 2015). *Invited.*
39. **Douma, F. P.,** Lari, A. "Self-Driving Vehicles: Current Status and Policy Implications for Minnesota," MnDOT Traffic Topics, Roseville, Minnesota. (November 17, 2014). *Invited.*

40. **Douma, F. P.** "The Road to Self-Driving Cars," 2012 RoboBusiness Leadership Summit, Pittsburgh, Pennsylvania. (October 23, 2012). *Invited.*
41. **Douma, F. P.** "Identifying Issues Related to Deployment of Automatic Speed Enforcement in Minnesota," Minnesota Work Zone Safety Committee, Arden Hills, Minnesota. (October 15, 2012). *Invited.*
42. **Douma, F. P.** "ITS Personal Data Needs - How Much Do We Really Need To Know?," Under Watchful Eyes: Technologies that Track symposium Illinois Institute of Technology Chicago-Kent College of Law, Chicago, Illinois. (October 5, 2012). *Invited.*
43. **Douma, F. P.** "Smart Cars and Smarter People: Is There Room for Both in our Transportation Future?," Grinnell College, Grinnell, Iowa. (April 5, 2012). *Invited.*
44. **Douma, F. P.** "Emerging Policy and Legal Issues," "Location Data and Privacy Values: Implications for Policy and Planning" Panel 91st Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 25, 2012). *Invited.*
45. **Douma, F. P., Aue, S.** "'But Officer, it wasn't my fault...the car did it!' and other Criminal Liability Issues Involving Autonomous Vehicles," Santa Clara Law Review Annual Symposium Santa Clara University School of Law, Santa Clara, California. (January 20, 2012). *Invited.*
46. **Douma, F. P.** "Transit and 'Complete Streets' in Central Minnesota," Collage of Sustainability conference University of Minnesota's Regional Sustainable Development Partnerships, Pine River, Minnesota. (October 13, 2011). *Invited.*
47. **Douma, F. P.** "Protect Yourself: Addressing Privacy Issues Both Legally and Politically," Planning & Enabling Smart Transportation Summit, Toronto, Ontario, Canada. (December 2010). *Invited.*
48. **Douma, F. P.** "Itasca County Area Transportation Study," Minnesota Center for Transportation Studies Research Seminar, Minneapolis, Minnesota. (September 2010). *Invited.*
49. **Douma, F. P.** "The Challenge of ITS for the Law of Privacy in the United States," Computers, Freedom and Privacy Conference, San Jose, California. (June 2010). *Invited.*
50. **Douma, F. P.** "Itasca County Area Transportation Study," Minnesota Public Transportation Conference, Rochester, Minnesota. (June 2010). *Invited.*
51. **Douma, F. P., Aue, S.** "The Implications of Current and Emerging Privacy Law for ITS," University of Minnesota Intelligent Transportation Systems (ITS) Institute Board of Directors, Minneapolis, Minnesota. (December 2009). *Invited.*
52. **Douma, F. P., Deckenbach, J.** "The Implications of Current and Emerging Privacy Law for ITS," University of Minnesota ITS Institute Advanced Transportation Seminar Series, Minneapolis, Minnesota. (September 2009). *Invited.*
53. **Douma, F. P.** "In-Vehicle Technology: Monitoring Teen Compliance with Graduated Driver Licensing Requirements (Privacy Implications)," American Association of Motor Vehicle Administrators 76th Annual International Conference, San Diego, California. (August 2009). *Invited.*
54. **Douma, F. P., Poindexter, G., Frooman, S.** "Examining Success of Bus Only Shoulder Lanes," Metro Transit Senior Staff, Minneapolis, Minnesota. (December 16, 2008). *Invited.*
55. **Douma, F. P.** "Keys in Transit Corridor Planning," Citizen's Forum, Roseville, Minnesota. (March 14, 2008). *Invited.*
56. **Douma, F. P., Barnes, G.** "Transit for All Ages," Minnesota Gerontological Society Annual

Conference, Brooklyn Park, Minnesota. (April 27, 2007). *Invited*.

57. **Douma, F. P.** "Planning for Multi-Modal Transportation Corridors: Developing a Best Practices Framework," St. Paul Transportation Management Organization Board of Directors, St. Paul, Minnesota. (June 2005). *Invited*.
58. **Douma, F. P.** "Community-Based Transit," City of St. Paul Senior Advisory Committee. (July 2004). *Invited*.
59. **Douma, F. P.,** Lovejoy, A. "Corridor Best Practices," City of St. Paul Planning Commission, St. Paul, Minnesota. (January 2003). *Invited*.
60. **Douma, F. P.,** Hedblom, M. "Wireless Communication Applications for Transportation: User Boon or Booby Trap?," Telecommunications and Information Society Policy Forum, Minneapolis, Minnesota. (September 2002). *Invited*.

### ***Testimony to Minnesota House Legislators***

1. **Douma, F. P.** "University of Minnesota Research," Climate Action Caucus Transportation Conversation Minnesota House DFL Climate Action Caucus, St Paul, Minnesota, United States. (October 24, 2019). *Invited. Peer-reviewed/refereed*.  
URL: <https://www.house.leg.state.mn.us/Caucus/View/DFL/26076>  
A summary of University of Minnesota research on reducing transportation's impact on the environment

### ***Webinar***

1. Garry, T., (Presenter), **Douma, F. P., (Presenter)** "ITS Personal Data Needs - How Much Do We Really Need To Know?," ITS America Webinar Series. (February 26, 2013). *Invited*.

### **Presentations, Posters, and Exhibits**

*Underline - indicates student presenter*

#### ***Demonstration***

1. **Douma, F.** "Demonstration of EZ-10 Autonomous Shuttle," University of Minnesota, MnDOT, First Transit, Minneapolis. (April 30, 2018).

#### ***Podium***

1. **Douma, F. P., (Moderator)**, Kohne, N., (Presenter), Rubin, B., (Presenter) "Data Privacy Review: What Do We Know (and Who Else Can Know It?," 60th Annual Workshop on Transportation Law Transportation Research Board. (September 14, 2021). *Peer-reviewed/refereed*.  
Now that we are more than one-fifth of the way into the 21st century, it's safe to say that how transportation data is generated, used and regulated has changed substantially since the end of the 20th century. Implementation of non-transportation focused privacy laws, such as the General Data Protection Regulation (GDPR) in Europe and California's Consumer Protection Act (CCPA) have had far reaching implications. Presenters in this session will first provide an overview of how these and other developments now shape the "legal landscape" for privacy in transportation, as well as discussion of what this means for operating in this "landscape" from both the public and private sector perspectives.
2. **Douma, F. P., (Author)**, Napoline, K., (Author & Presenter), Lari, A., (Author) "Potential Implications of Connected and Automated Vehicles in Transportation-Disadvantaged Areas," Annual CTS Transportation Research Conference University of Minnesota Center for Transportation Studies, Minneapolis, Minnesota, United States. (November 5, 2020). *Peer-reviewed/refereed*.  
URL: [https://www.cts.umn.edu/sites/cts.umn.edu/files/2020-10/2020ResConf\\_finalprogram.pdf](https://www.cts.umn.edu/sites/cts.umn.edu/files/2020-10/2020ResConf_finalprogram.pdf)
3. **Douma, F. P., (Author & Presenter)**, Wu, X., (Author), Cao, J., (Author) "Impacts of Vehicle Automation on Transport-Disadvantaged People," Annual CTS Transportation Research

Convergence University of Minnesota Center for Transportation Studies, Minneapolis, Minnesota, United States. (November 5, 2020). *Peer-reviewed/refereed*.

URL: [https://www.cts.umn.edu/sites/cts.umn.edu/files/2020-10/2020ResConf\\_finalprogram.pdf](https://www.cts.umn.edu/sites/cts.umn.edu/files/2020-10/2020ResConf_finalprogram.pdf)

4. **Douma, F. P., (Presenter)** "Collecting and Handling Customer Data: Potential Issues and Proposed Best Practices," TRB 99th Annual Meeting Transportation Research Board, Washington, District of Columbia, United States. (January 10, 2020). *Peer-reviewed/refereed*.

Discussion of legal and policy issues related to collection and retention of identifying information in transportation

5. **Douma, F. P., (Author & Presenter), Petersen, E., (Author)** "Scenarios and Justification for Automated Vehicle Demonstration in Nonurban Minnesota," 2019 Annual CTS Transportation Research Conference University of Minnesota Center for Transportation Studies, Minneapolis, Minnesota, United States. (November 7, 2019). *Peer-reviewed/refereed*.

URL: [https://cts.prd.umn.edu/sites/cts.umn.edu/files/2020-07/3\\_douma.pdf](https://cts.prd.umn.edu/sites/cts.umn.edu/files/2020-07/3_douma.pdf)

Automated vehicles (AVs) have the potential to disrupt the current transportation system and culture. While experts debate the exact timeline, the question is likely a matter of when, not if. Therefore, communities of all kinds need to prepare for this future. Small urban and rural communities, in particular, could benefit from the development of the technology, as many of their residents are unable to drive due to age and/or disability. Automated technology could provide a cost-effective and efficient solution for these communities, but so far, most of the AV testing has been conducted in densely populated urban areas. This project provides justification for why rural and small urban communities should host AV demonstrations and how these communities can create a plan to do so. We accomplish this task by providing information about rural and small urban communities and by reviewing the current state of AV technology, the legal environment for AVs, and best practices from past and current AV demonstrations. We also engage with two small urban communities in Minnesota to gather information about real community needs, desires, and limitations.

6. **Peterson, C., (Author & Presenter), Douma, F. P., (Author), Morris, N., (Author)** "Addressing Key Concerns Regarding Automated Speed Enforcement via Interactive Survey," Annual Meeting Transportation Research Board, Washington, District of Columbia, United States. (January 11, 2017). *Peer-reviewed/refereed*.

### Poster

1. **Emory, K., (Author & Presenter), Cao, J., (Author & Presenter), Douma, F. P., (Author & Presenter)** "Autonomous vehicle policies with equity implications: Patterns and gaps," Conference on Advancing Transportation Equity Transportation Research Board. (September 10, 2021). *Peer-reviewed/refereed*.

Autonomous vehicles (AVs) may improve or harm social equity for disadvantaged groups. Government agencies, planning organizations, businesses, and nonprofits have drafted or published an array of AV-related policies that have equity implications. Through a review of academic and grey literature, this study pioneers a comprehensive analysis of these policies in terms of patterns, frequencies and gaps. Our analysis shows that these policies can be grouped into three categories: access and inclusion, multimodal transportation, and community wellbeing. Regarding specific policies, considerations for a shared-use model and impacts to the economy dominate the policy landscape. Helping marginalized communities, urban parking, and automating transit are also prevalent policies. However, considerations for people with low incomes and people of color are not well represented, nor are personal security issues within shared vehicles, or models for deploying AVs in rural communities. Policymakers are beginning to plan for the potential equity impacts of AVs, but more opportunities remain for developing policies that will ensure the most equitable outcomes. This study elucidates the different types of policies with equity implications and provides planners and policymakers a base from which to draft their own policy.

2. **Douma, F. P., (Presenter), Wu, X., (Author & Presenter), Cao, J., (Presenter)** "The Impacts of Vehicle automation on Transport-Disadvantaged People," 2020 TRB Annual Meeting Transportation Research Board, Washington, District of Columbia, United States. (January 26, 2021). *Peer-reviewed/refereed*.

As an emerging technological innovation, vehicle automation will have profound impacts on various aspects of society. Despite many initial discussions on related topics, few of the studies have emphasized how this new technology will affect equity. To better understand how autonomous vehicles (AV) might affect equity, this study

explores the potential influence of AV on eight groups of the transportation-disadvantaged population. Based on existing travel behaviors of the identified population, we conclude that AVs tend to bring more benefits to some people, but might have mixed effects on others. Based on our findings, we further provide implications for future policymaking.

3. Munnich, L., **Douma, F. P.**, et. al. "Evaluating Effectiveness of States' Toward-Zero-Deaths Programs," 92nd Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 14, 2013).
4. Lari, A., **Douma, F. P.**, Lang Yang, K., Caskey, K., Cureton, C. "Innovative Parking Pricing Demonstration: Introducing Flexibility and Incentives to Parking Contracts," 91st Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 23, 2012).
5. Lari, A., **Douma, F. P.**, Lang Yang, K., Caskey, K. "Parking Pricing," 90th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 25, 2011).
6. **Douma, F. P.**, Cleaveland, F. "Impact of Bicycling Facilities on Commute Mode Share," 88th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2009).
7. **Douma, F. P.**, Frooman, S., Deckenbach, J. "What You Need to Know and Not Know: Current and Engaging Privacy Law for Intelligent Transportation Systems," 87th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2008).
8. **Douma, F. P.**, Peterson, S., Zmud, J. "Before and After Results of I-394 HOT Lane Panel Survey," 86th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2007).
9. **Douma, F. P.**, Andrew, J. "Developing a Model for Carsharing in Twin Cities Neighborhoods," 85th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2006).
10. **Douma, F. P.**, Patterson, T. "Pricing Comes to Minnesota: Baseline Attitudinal Evaluation of I-394 HOT Lane Project," 85th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2006).
11. **Douma, F. P.**, Wilson, S. "Transportation Needs of Foreign-born Ethnic Subpopulations in Rural and Urban Communities: an Environmental Justice Perspective," 85th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2006).
12. **Douma, F. P.** "Guidestar 2001 Survey and Diary," 83rd Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2004).
13. **Douma, F. P.**, Kriz, K. "Planning for Multi-Modal Transportation Corridors: Developing a Best Practices Framework," 83rd Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2004).

### ***Presentation/Talk***

1. **Douma, F. P.** "Findings from Research," Parking and Mode Shift in Minneapolis MnDOT, Minneapolis, Minnesota. (August 6, 2018).  
URL: <http://www.cts.umn.edu/publications/catalyst/2018/september/abc>  
Audience size: 85  
Describe the audience: Transportation practitioners, researchers and students
2. **Douma, F. P.**, Lari, A. "Policy Implications of Self-Driving Vehicles," West Central Initiative Fund Economic Development Committee, Fergus Falls, Minnesota. (July 9, 2018).

Audience size: 20

Describe the audience: West Central Initiative Fund Economic Development Committee

3. **Douma, F. P.**, Lari, A. "Policy Implications for Self-Driving Vehicles," Region 9 Development Commission, Mankato, Minnesota. (April 11, 2018).  
Audience size: 40  
Describe the audience: local officials, planning commissioners, members of the public
4. **Douma, F. P.** "The US Starts the MBUF Engine," MBUFA Annual Conference, Washington, District of Columbia. (March 16, 2017).  
Audience size: 50  
Describe the audience: Practitioners, consultants and academics
5. **Douma, F. P.** "Self-Driving Vehicles: Opportunities for Equality in Access," 9th University Transportation Center (UTC) Spotlight Conference: Connected and Automated Vehicles, Washington, District of Columbia. (November 4, 2015).
6. **Douma, F. P.** "Self-Driving Vehicles: Opportunities for Minnesota Policy and Law," Minnesota's Transportation Conference, Bloomington, Minnesota. (March 2015).
7. **Douma, F. P.** "Self-Driving Vehicles: Opportunities and Challenges for Minnesota," ITS Minnesota Fall Forum, St. Paul, Minnesota. (October 21, 2014).
8. Fan, Y., Chen, Q., Liao, C.-F., **Douma, F. P.** "UbiActive: Smartphone-Based Tool for Trip Detection and Travel-Related Physical Activity Assessment," 92nd Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 15, 2013).
9. **Douma, F. P.** "Identifying Issues Related to Deployment of Automated Speed Enforcement," Minnesota Towards Zero Deaths Conference, Bloomington, Minnesota. (October 22, 2012).
10. **Douma, F. P.** "Minnesota's Primary Seat Belt Saves Lives and Money," Minnesota Towards Zero Deaths Conference, Bloomington, Minnesota. (October 22, 2012).
11. **Douma, F. P.**, Zimmer, C. "Complete Streets through Community Partnerships: The Grand Rapids Experience," Minnesota Department of Transportation Non-motorized Transportation Research Group, Roseville, Minnesota. (June 6, 2012).
12. **Douma, F. P.**, Loveland, J., Thorpe, D. "Identifying Issues Related to Deployment of Automated Speed Enforcement," University of Minnesota Center for Transportation Studies Annual Transportation Research Conference, St. Paul, Minnesota. (May 24, 2012).
13. **Douma, F. P.** "ITS Data Needs: How Much Do We Really Need to Know?," University of Minnesota Center for Transportation Studies Annual Transportation Research Conference, St. Paul, Minnesota. (May 23, 2012).
14. Horan, T., **Douma, F. P.**, Munnich, L. "SafeRoadMaps and CrashHelp," Minnesota Towards Zero Deaths Quarterly Breakfast. (January 11, 2012).
15. Munnich, L., Horan, T., **Douma, F. P.** "Center for Excellence in Rural Safety," Minnesota Tribes and Transportation Conference, Prairie Island Reservation. (October 25, 2011).
16. Lari, A., **Douma, F. P.**, Lang Yang, K. "eWorkPlace: Earth Friendly, Work-Life Friendly, Smart Business Strategy," Annual Conference of the Minnesota chapter of the American Planning Association, St. Cloud, Minnesota. (September 30, 2011).
17. **Douma, F. P.** "ITS Data Needs: How Much Do We Really Need to Know?," University of Minnesota TechPlan Roundtable, Minneapolis, Minnesota. (August 19, 2011).
18. Lari, A., **Douma, F. P.**, Lang Yang, K., Caskey, K. "Parking Pricing," University of Minnesota

Center for Transportation Studies Annual Transportation Research Conference, St. Paul, Minnesota. (May 25, 2011).

19. Cao, X., Xu, Z., **Douma, F. P.** "Substitution between E-shopping and Travel: Evidence from the Twin Cities," 90th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 26, 2011).
20. **Douma, F. P.**, Cureton, C., Schmit, M., Fan, Y. "Itasca County Area Transportation Study," University of Minnesota Center for Transportation Studies Annual Transportation Research Conference, St. Paul, Minnesota. (April 2010).
21. Aue, S., **Douma, F. P.** "ITS and Privacy: Suggestions for Peaceful Coexistence," University of Minnesota Center for Transportation Studies Annual Transportation Research Conference, St. Paul, Minnesota. (April 2010).
22. **Douma, F. P.**, Deckenbach, J. "The Implications of Current and Emerging Privacy Law for ITS," ITS Minnesota 16th Annual Meeting & Information Exchange, St. Paul, Minnesota. (March 2010).
23. Cao, X., **Douma, F. P.** "Substitution between E-shopping and Travel: Evidence from the Twin Cities," 89th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2010).
24. Cao, X., **Douma, F. P.**, Cleaveland, F. "Substitution between E-shopping and Travel: Evidence from the Twin Cities," University of Minnesota Center for Transportation Studies Annual Research Conference, Bloomington, Minnesota. (May 2009).
25. **Douma, F. P.**, Gaug, R. "Carsharing in the Twin Cities: Measuring Impacts on Travel Behavior and Automobile Ownership," 88th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2009).
26. **Douma, F. P.**, Cleaveland, F. "Impact of Bicycling Facilities on Commute Mode Share," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2008).
27. Deckenbach, J., **Douma, F. P.** "ITS and Privacy: Developing New Rules for Virtual Roads," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2008).
28. **Douma, F. P.**, Gaug, R. "Carsharing in the Twin Cities: Measuring Impacts on Travel Behavior and Automobile Ownership," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2008).
29. **Douma, F. P.**, Poindexter, G., Frooman, S. "Bus Only Shoulder in the Twin Cities," 87th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2008).
30. **Douma, F. P.**, Rohde, B. "Center for Excellence in Rural Safety," West Central Minnesota Transportation Advisory Committee, Fergus Falls, Minnesota. (July 2007).
31. Stein, B., Frooman, S., **Douma, F. P.** "Twin Cities Bus-Only Shoulder Lanes - Are They Working?," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2007).
32. **Douma, F. P.**, Raju, R. "Urban Transportation Corridor Development Case Studies: Midtown Greenway and Bottineau Boulevard," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2007).

33. Zmud, J., Bradley, M., **Douma, F. P.** "Panel Survey Evaluation of Attitudes and Willingness to Pay for Tolled Facilities," 86th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2007).
34. **Douma, F. P.**, Horan, T., Munnich, L. "Emergency Medical Services in Rural Areas," Minnesota Tribes and Transportation Conference Leech Lake Reservation. (October 2006).
35. Anderson, J., **Douma, F. P.** "Telework as a Return to Work Strategy: Challenging Barriers and Unprecedented Opportunities," International Telework Academy's 11th International Workshop on Telework, Fredericton, New Brunswick, Canada. (August 2006).
36. Peterson, S., **Douma, F. P.** "Before and After Results of I-394 HOT Lane Panel Survey," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2006).
37. Schively, C., Blackstad, L., **Douma, F. P.**, Garner, M. "Planning for Multi-Modal Transportation Corridors: Developing a Best Practices Framework," American Planning Association National Conference, San Antonio, Texas. (April 2006).
38. **Douma, F. P.** "Planning for Multi-Modal Transportation Corridors: Developing a Best Practices Framework," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2005).
39. Patterson, T., **Douma, F. P.** "Pricing Comes to Minnesota: Baseline Attitudinal Evaluation of I-394 HOT Lane Project," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2005).
40. Wilson, S., **Douma, F. P.** "Transportation Needs of Foreign-born Ethnic Subpopulations in Rural and Urban Communities: an Environmental Justice Perspective," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2005).
41. **Douma, F. P.**, Wilson, S. "Transportation Needs of Foreign-born Ethnic Subpopulations in Rural and Urban Communities: an Environmental Justice Perspective," Annual Meeting of the Intelligent Transportation Society of America, Long Beach, California. (April 2005).
42. Andrew, J., **Douma, F. P.** "Developing a Model for Carsharing in Twin Cities Neighborhoods," University of Minnesota Center for Transportation Studies Planning and Environment Council, Minneapolis, Minnesota. (February 2005).
43. **Douma, F. P.** "Intelligent Transportation Systems and Other Technological Assistance Used in Minnesota Community-Based Transportation," 84th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2005).
44. **Douma, F. P.** "Using ITS to Better Serve Diverse Populations," Annual Research Conference University of Minnesota Center for Transportation Studies, St. Paul, Minnesota. (May 2004).
45. **Douma, F. P.**, Hedblom, M. "ITS Opportunities Resulting from Developments in Home Broadband Telecommunications," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (May 2004).
46. **Douma, F. P.**, Hedblom, M. "ITS Opportunities Resulting from Developments in Home Broadband Telecommunications," Annual Meeting of the Intelligent Transportation Society of America, San Antonio, Texas. (April 2004).
47. **Douma, F. P.** "Community-Based Transit," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (April 2003).
48. **Douma, F. P.** "Corridor Best Practices," University of Minnesota Center for Transportation Studies



Annual Research Conference, St. Paul, Minnesota. (April 2003).

49. **Douma, F. P.** "Guidestar 2001 Survey and Diary Presentation," University of Minnesota Center for Transportation Studies Annual Research Conference, St. Paul, Minnesota. (April 2003).
50. Wells, K., **Douma, F. P.**, Pidaparathi, P. "How Was Your Trip? Exploring the Relationship Between Telecommunications and Travel Through Time Use Diary," 81st Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2002).
51. Kuhn, E., **Douma, F. P.** "Utilizing Transportation Technology to Support Strategic Management Initiatives," 81st Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2002).
52. **Douma, F. P.**, Kuhn, E., Chen, W. "Sustainable Transportation," Sustainable Development forum, New Ulm, Minnesota. (August 2001).
53. Munnich, L., Pansing, C., **Douma, F. P.** "Sustainable Transportation," Minnesota Department of Transportation Office of Environmental Services, St. Paul, Minnesota. (June 2001).
54. Munnich, L., Pansing, C., **Douma, F. P.** "Sustainable Transportation," Minnesota Department of Transportation Executive Team, St. Paul, Minnesota. (March 2001).
55. Wells, K., **Douma, F. P.**, Loimer, H., Olson, L., Pansing, C. "Telecommuting Implications for Travel Behavior: Case Studies from Minnesota," 80th Annual Meeting of the Transportation Research Board, Washington, District of Columbia. (January 2001).

### ***Stakeholder Roundtable***

1. **Douma, F. P.** "Roundtable on Autonomous Vehicles," Blandin Foundation, Grand Rapids, Minnesota. (November 13, 2017).  
Audience size: 25  
Describe the audience: government officials, transit providers and other stakeholders

### ***Video***

1. **Douma, F. P.** "Telework and e-learning," Minnesota GO Strategic Planning effort. (April 2011).

### **Media Contributions**

1. "Self-driving cars? They're closer than you think," KMSU December 7, 2018  
<https://www.ruralmn.org/self-driving-cars-theyre-closer-than-you-think/>  
Opportunities for self-driving vehicles in greater MN
2. "Hourcar embraces car-sharing's electric future in the Twin Cities," Minneapolis Star-Tribune October 23, 2018  
<http://www.startribune.com/hourcar-embraces-car-sharing-s-electric-future-in-the-twin-cities/498253211/>  
Discussion of car-sharing opportunities in the Twin Cities
3. "Car pooling? That's so '70s," Minnesota Public Radio August 9, 2018  
[https://blogs.mprnews.org/newscut/2018/08/car-pooling-thats-so-70s/#disqus\\_thread](https://blogs.mprnews.org/newscut/2018/08/car-pooling-thats-so-70s/#disqus_thread)  
Reaction to News reporting on Parking Symposium
4. "Study: Changes to downtown Minneapolis ramps could help combat congestion," Minneapolis Star-Tribune August 8, 2018

<http://www.startribune.com/study-changes-to-downtown-minneapolis-ramps-could-help-combat-congestion/490369561/>  
Summary of Parking Symposium

5. "Robo taxis in downtown White Bear? Not here, not yet,"  
White Bear Press August 8, 2018

[http://www.presspubs.com/white\\_bear/news/article\\_554d41ca-9b21-11e8-b0f5-575ef694cfa1.html](http://www.presspubs.com/white_bear/news/article_554d41ca-9b21-11e8-b0f5-575ef694cfa1.html)

6. "Researchers look at future of downtown Minneapolis parking ramps," KSTP-5 News August 6, 2018  
<https://kstp.com/traffic/researchers-look-at-future-of-downtown-minneapolis-parking-ramps-/5019941/>  
Summary of Parking Symposium and Research

7. "Wisconsin frac sand producers seek relief from rail costs, service issues," LaCrosse Tribune July 30, 2018  
[https://lacrossetribune.com/news/local/wisconsin-frac-sand-producers-seek-relief-from-rail-costs-service/article\\_5bcb464e-2dd9-5ecf-9824-09cc24b1c7e7.html](https://lacrossetribune.com/news/local/wisconsin-frac-sand-producers-seek-relief-from-rail-costs-service/article_5bcb464e-2dd9-5ecf-9824-09cc24b1c7e7.html)

8. "John Hines Show," WCCO July 18, 2018  
<https://omny.fm/shows/john-hines/playlists/podcast/embed?style=artwork&share=1&selectedClip=e616b013-9d82-43e6-be29-a921010e463d>  
Radio interview on impact of scooters and other shared mobility on transit, parking and related issues

9. "Self-driving bus travels over the Washington Avenue Bridge," Minnesota Daily May 1, 2018  
<http://www.mndaily.com/article/2018/05/n-self-driving-bus-travels-over-the-washington-avenue-bridge>

10. "How will driverless cars change our cities?," Minnesota Public Radio March 20, 2018  
<https://www.mprnews.org/story/2018/03/20/driverless-cars-change-our-lives>

11. "MnDOT tests Driverless Shuttle Bus," Minneapolis Star Tribune December 13, 2017  
<http://www.startribune.com/mndot-tests-driverless-shuttle-bus/463742663/>

12. "Minnesota small towns envision a driverless future," Minnesota Public Radio November 27, 2017  
<https://www.mprnews.org/story/2017/11/27/minnesota-small-towns-envision-a-driverless-future->

13. "With self-driving cars nearly a reality, Congress wonders how to regulate them," MinnPost October 31, 2017  
<https://www.minnpost.com/politics-policy/2017/10/self-driving-cars-nearly-reality-congress-wonders-how-regulate-them>

14. "Polaris going after autonomous driving contract for Army," Minneapolis Star Tribune October 6, 2017  
<http://www.startribune.com/polaris-going-after-autonomous-driving-contract-for-army/449287313/>

15. "Polaris' electric GEM vehicles go driverless in Detroit,"  
Minneapolis Star Tribune <http://www.startribune.com/polaris-electric-gem-vehicles-go-driverless-in-detroit/444807623/> September 17, 2017
16. "Driverless future gets put to the test at St. Louis Park event,"  
Minneapolis Star Tribune <http://www.startribune.com/event-considers-a-driverless-future/443480353/> September 9, 2017
17. "It's not your imagination — parking is disappearing in  
Minneapolis," Minneapolis Star Tribune  
<http://www.startribune.com/it-s-not-your-imagination-parking-is-disappearing-in-minneapolis/442556673/> September 2, 2017
18. "Minnesota planners begin to envision driverless future,"  
Minneapolis Star Tribune <http://www.startribune.com/minnesota-planners-envision-driverless-future/437404083/> July 31, 2017
19. "Good Question: How Do Driverless Cars Work?," WCCO-  
TV <http://minnesota.cbslocal.com/2017/07/18/good-question-driverless-cars/> July 18, 2017
20. "Could these be solutions to Twin Cities traffic problems?," St  
Paul Pioneer Press <https://www.twincities.com/2017/06/16/five-possible-solutions-to-twin-cities-congestion/> June 16, 2017
21. "Car2Go and gone: Legislation aims to lure more car-sharing  
services to TC," Minneapolis Star Tribune  
<http://www.startribune.com/car2go-and-gone-legislation-aims-to-lure-more-car-sharing-services-to-tc/413444813/> February 11, 2017

## TEACHING

### Scheduled Teaching

Urban & Regional Planning: PA 4200: Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018

Urban and Regional Planning: PA 4200: Fall 2012

An introductory class that gives an overview of planning theory and practice, with primary attention to current issues in planning practice in the United States. The content covers land use, urban design, transportation, community development, housing, and environmental planning problems within the broader context of the historic development of cities, political processes, and regional and national economic forces.

Environmental Study Design: PA 5742: Fall 2017

Urban Infrastructure Systems: PA 5751: Spring 2017, Spring 2018

### Instructional Activity

#### *University of Minnesota*

Guest Lecture, Transportation Sharing: Market-Based Policy Change, OLPD, 35 participants November 2019

Guest Lecture, Policy Implications for Connected and Automated April 17, 2019

Vehicles, Humphrey School, 20 participants

Guest Lecture, Transportation Sharing: Market-Based Policy Change, 60 participants April 2019

OLPD 2811: Guest Lecture, Transportation Sharing: Market-Based Policy Change, Lecturer November 29, 2018

PA 5211: Guest Lecture, Self-Driving Vehicles: Equity and Legal Implications, Lecturer September 13, 2018

PA 8202: Guest Lecture, Self Driving Vehicle Implications, Lecturer April 30, 2018

***Grinnell College***

Guest Lecture, Policy Implications of Self-Driving Vehicles, Grinnell College, Lecturer, 35 participants April 24, 2018

Guest Lecture, Policy Implications of Self-Driving Vehicles, Grinnell College, Lecturer, 20 participants October 6, 2017

***Other***

Guest Lecture, EWorkplace and Telework, Lecturer April 12, 2017

**ADVISING AND MENTORING**

**Graduate Student Activities**

***Advisees***

Rachel Benson, Urban/Regional Planning MURP	2021 - Present
Kaitlyn Denten, Urban/Regional Planning MURP	2021 - Present
Isak Johnson, Urban/Regional Planning MURP	2021 - Present
Joseph Lehman, Urban/Regional Planning MURP	2021 - Present
Jacob Berger, Urban/Regional Planning MURP	2020 - Present
Robert King, Urban/Regional Planning MURP	2020 - 2022
Hana Randle, Urban/Regional Planning MURP	2020 - 2022
Timothy Shebesta, Urban/Regional Planning MURP	2020 - 2022
Noelle Stadler, Urban/Regional Planning MURP	2021
Kyle Malone, Urban/Regional Planning MURP	2019 - 2021
Meredith Benesh, Urban/Regional Planning MURP	2019 - 2021
Sarah Paulus, Urban/Regional Planning MURP	2019 - 2021
Shannon Engstrom, Urban/Regional Planning MURP	2018 - 2020
Galen Ryan, Urban/Regional Planning MURP	2018 - 2020
Jerica Gomez, Urban/Regional Planning MURP	2019 - 2020
Yuxuan Guo, Urban/Regional Planning MURP	2017 - 2019
Max Pattsner, Urban/Regional Planning MURP	2017 - 2019
Jonathan Reisetter, Urban/Regional Planning MURP	2017 - 2019
Jessica Wyatt, Urban/Regional Planning MURP	2016 - 2018
Frank Alarcon, Urban/Regional Planning MURP	2016 - 2018
Gretchen Buechler, Urban/Regional Planning MURP	2016 - 2018

Ashley Hartle, Urban/Regional Planning MURP 2016 - 2018

***Committee Advising***

***Doctoral Final Committee: Committee Reviewer***

Peter Nixon, Bpro/Bsys Sci Eng Mgmt Ph D 2021  
Thesis: Quantifying Agrifood Production and Consumption at the  
U.S. Metropolitan and County Level to Inform Urban Food  
System Interventions

***Doctoral Preliminary Committee: Committee Member***

Peter Nixon, Bpro/Bsys Sci Eng Mgmt Ph D 2017 - 2021  
Thesis: Quantifying Agrifood Production and Consumption at the  
U.S. Metropolitan and County Level to Inform Urban Food  
System Interventions

***Master's Thesis/Research Committee: Committee Member***

Zheyang Yuan, Architecture M S 2019 - 2020  
Bailey Hanson, Architecture M S 2017

**SERVICE**

**Service to the Discipline/Profession/Interdisciplinary Area(s)**

***Co-chair***

Transportation Data Privacy Task Force, Appointed, 2016 - Present  
approximately 25 hours spent per year

***Member***

Emerging Technology Law Committee, Transportation Research Board August 2007 - Present

Effects of Information and Communication Technologies on  
Travel Choices Committee, Transportation Research Board January 2001 - January 2012

***Reviewer***

Transportation Research Record 2003 - Present

Journal of Transportation and Land Use

Journal of Transportation Law, Logistics and Policy

Transportation Research Part A: Policy and Practice

Transportation Research Part D: Transport and Environment

**Service to the University/College/Department**

**University of Minnesota**

***College***

Chair, Awards and Honors Committee September 2017 - May 2019

***University***

Member, SCFA Retirement Subcommittee	September 2013 - May 2018
Member, Committee on Committees	September 2007 - June 2013
Member, Professional and Administrative Senate	September 2000 - June 2012
Member, Humphrey School of Public Affairs Dean Search Committee	November 2010 - July 2011
Member, University of Minnesota Senate	September 2004 - June 2011

**Public and External Service**

Liaison, Planning, Land Use and Revenue Sub-Committee, Minnesota Governor's Connected and Automated Vehicle Advisory Council	August 2018 - December 2018
Member, Metro Mobility Task Force, St Paul	August 2017 - February 2018
Session Member, Macalester-Plymouth United Church	January 2011 - June 2017
Board Member, Neighborhood Energy Connection	October 2005 - October 2011
Judge, Minnesota Environmental Initiative Awards	2004
Member, Board of Deacons, Westminster Presbyterian Church	1998 - 2001