

UTCA

University Transportation Center for Alabama

The University of Alabama, The University of Alabama at Birmingham, and
The University of Alabama in Huntsville

A Review of the Center's Activities

4/1/2018 – 3/31/2019

Center Mission and Theme

The UTCA mission contributes to the overall mission of the US Department of Transportation (USDOT). Specifically, the UTCA seeks

To advance technology and expertise in the multiple disciplines that comprise transportation through the mechanisms of education, research, and technology transfer while serving as a university-based center of excellence (*2006 UTCA Strategic Plan*, p. 12)

The UTCA theme – *Management and Safety of Transportation Systems* – reflects the transportation needs of Alabama and the expertise of The University of Alabama System faculty.

The University of Alabama
University Transportation Center for Alabama
Active Center Projects
(includes 4/1/18 - 3/31/19 Awards plus Ongoing projects)

<u>Proposal #</u>	<u>Name</u>	<u>Role</u>	<u>Share</u>	<u>Sponsor</u>	<u>Proposal Title</u>	<u>StartDate</u>	<u>EndDate</u>	<u>Project_Type</u>	<u>Award Amount</u>	<u>GR#</u>	<u>UTCA#</u>
00-1559	Jones, Steven L	PI	0.90	ALDOT	Alabama Highway Performance Monitoring System Data Synthesis and Analysis	10/1/2017	1/31/2020	Research-Applied	903,032	26353	17405
00-1559	Smith, Randy K	Co-PI	0.10	ALDOT	Alabama Highway Performance Monitoring System Data Synthesis and Analysis	10/1/2017	1/31/2020	Research-Applied	106,239	26353	17405
00-1559	Tedla, Elsa	Co-PI	-	ALDOT	Alabama Highway Performance Monitoring System Data Synthesis and Analysis	10/1/2017	1/31/2020	Research-Applied	53,120	26353	17405
00-1561	Hainen, Alexander	PI	0.60	ALDOT	Using ALGO Traffic Data to Improve Traffic Incident Management	4/1/2018	12/31/2019	Research-Basic	109,003	26510	18403
00-1561	Smith, Randy	Co-PI	0.20	ALDOT	Using ALGO Traffic Data to Improve Traffic Incident Management	4/1/2018	12/31/2019	Research-Basic	36,334	26510	18403
00-1561	Jones, Steven	Co-PI	0.20	ALDOT	Using ALGO Traffic Data to Improve Traffic Incident Management	4/1/2018	12/31/2019	Research-Basic	36,334	26510	18403
00-445	Song, Wei	PI	1.00	ALDOT	Development of Cracking Condition Assessment System for Concrete Bridge Decks Using Image Processing Techniques	8/1/2016	1/31/2020	Research-Applied	309,594	25663	16405
15-0542	Hainen, Alex	PI	0.70	ALDOT	Tuscaloosa Traffic Signal Optimization	10/21/2015	7/1/2020	Research-Basic	2,096,961	25375	15411
15-0542	Lindly, Jay	PI	0.30	ALDOT	Tuscaloosa Traffic Signal Optimization	10/21/2015	7/1/2020	Research-Basic	898,697	25375	15411
15-0579	Amirkhanian, Armen	PI	1.00	ALDOT	Friction and Texture Retention of Concrete Pavements	10/1/2015	3/31/2019	Research-Basic	342,119	25316	15414
15-0801	Aaleti, Sriram	PI	1.00	ALDOT	Effect of Pile Embedment Length	8/1/2016	10/31/2018	Research-Basic	114,599	25568	16409
16-0253	Aaleti, Sriram	PI	1.00	ALDOT	Driven Precast Prestressed Pile Design and Construction Optimization	5/1/2017	6/30/2019	Research-Basic	159,987	25956	16410

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16-0674	Hainen, Alex	PI	0.66	ALDOT	Short Term-Quick Turnaround Services to Facilitate West Central Region Studies	8/17/2016	9/30/2018	Research-Basic	127,498	25694	16402
16-0674	Lindly, Jay	PI	0.34	ALDOT	Short Term-Quick Turnaround Services to Facilitate West Central Region Studies	8/17/2016	9/30/2018	Research-Basic	65,681	25694	16402
18-0259	Song, Wei	PI	1.00	ALDOT	Condition Assessment of Steel Box Girder Bridge Using Long-Term Field Measurements	4/1/2018	9/30/2020	Research-Basic	289,781	26483	18405
18-0406	Lindly, Jay	PI	0.50	ALDOT	Disadvantaged Business Enterprises: Supportive Services for a Business Development Program	4/19/2018	4/18/2019	Public Service	100,081	26456	18402
18-0406	Amirkhanian, Armen	Co-PI	0.50	ALDOT	Disadvantaged Business Enterprises: Supportive Services for a Business Development Program	4/19/2018	4/18/2019	Public Service	100,081	26456	18402
18-0482	Hainen, Alex	PI	0.50	ALDOT	Using TensorFlow for Traffic Monitoring in West Central Alabama	3/1/2018	1/1/2019	Research-Basic	20,000	26451	18401
18-0482	Johnson, Erik	Co-PI	0.50	ALDOT	Using TensorFlow for Traffic Monitoring in West Central Alabama	3/1/2018	1/1/2019	Research-Basic	20,000	26451	18401
18-0753	Jones, Steven	PI	-	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	-	26863	18409
18-0753	Liu, Jun	Co-PI	0.55	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	188,042	26863	18409
18-0753	Smith, Randy	Co-PI	0.15	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	51,284	26863	18409
18-0753	Graettinger, Andrew	Co-PI	0.15	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	51,284	26863	18409
18-0753	Hainen, Alexander	Co-PI	0.15	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	51,284	26863	18409

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18-0753	Lidbe, Abhay	Co-PI	-	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	-	26863	18409
18-0753	Adanu, Emmanuel	Co-PI	-	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	-	26863	18409
18-0786	Hainen, Alexander	PI	0.50	Purdue University	Enhancements to Traffic Signal Hi Resolution Data Logger Enumerations	7/1/2018	8/31/2019	Research-Basic	45,597	26787	18407
18-0786	Atkison, Travis	Co-PI	0.50	Purdue University	Enhancements to Traffic Signal Hi Resolution Data Logger Enumerations	7/1/2018	8/31/2019	Research-Basic	45,597	26787	18407
18-0787	Tedla, Elsa	PI	0.05	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	11/27/2018	11/30/2020	Research-Basic	18,825	26851	18408
18-0787	Jones, Steven	Co-PI	0.70	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	11/27/2018	11/30/2020	Research-Basic	263,551	26851	18408
18-0787	Smith, Randy	Co-PI	0.25	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	11/27/2018	11/30/2020	Research-Basic	94,125	26851	18408
18-0795	Amirkhanian	PI	1.00	Tri-County Technical College - TCTC	Characterization of Bases and Subbases for AASHTO ME Pavement Design	6/11/2018	8/31/2019	Research-Basic	64,020	26552	18404
18-1098	Atkison, Travis	PI	0.50	ALDOT	Alabama Connected Vehicle Application Research	3/1/2019	12/31/2020	Research-Basic	131,352	26977	19401
18-1098	Hainen, Alex	PI	0.50	ALDOT	Alabama Connected Vehicle Application Research	3/1/2019	12/31/2020	Research-Basic	131,352	26977	19401
18-1235	Jones, Steven	PI	1.00	ALDOT	Alabama Transportation Data Research and Reporting Program	10/1/2018	9/30/2019	Research-Basic	785,000	26781	18406

\$ 7,810,455

Center Participants

a. Administration

The UTCA headquarters is located in Cyber Hall on The University of Alabama campus. Each campus (UA, UAB, and UAH) has a branch office operating under the direction of an associate director. The executive director and associate directors form the Executive Committee, which provides guidance and direction for Center activities. Faculty members engaged in UTCA projects work in their own offices on their own campuses.

The five individuals listed below are continuously assigned to the UTCA, all on a part-time basis.

Dr. Jay K. Lindly, Executive Director

Department of Civil, Construction, and Environmental Engineering
The University of Alabama
Tuscaloosa, AL

Dr. Steven Jones, Associate Director

Department of Civil, Construction, and Environmental Engineering
The University of Alabama
Tuscaloosa, AL

Dr. Fouad H. Fouad, Associate Director

Department of Civil, Construction, and Environmental Engineering
The University of Alabama at Birmingham
Birmingham, AL

Dr. Houssam Toutanji, Associate Director

Department of Civil and Environmental Engineering
The University of Alabama in Huntsville
Huntsville, AL

Mrs. Connie Harris, Administrative Secretary

Department of Civil, Construction, and Environmental Engineering
The University of Alabama
Tuscaloosa, AL

b. UA Faculty Working on UTCA Projects/Activities during 4/1/18 – 3/31/19

Faculty	Dept.	Project ID	Project Title	PI	Fund Source
Aaleti, Sriram	CCEE	16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	X	ALDOT
Aaleti, Sriram	CCEE	16410	Driven Precast Prestressed Pile design and Construction Optimization	X	ALDOT
Amirkhanin, Armen	CCEE	15414	Friction and Texture Retention of Concrete Pavements	X	Portland Cement/ALDOT
Amirkhanin, Armen	CCEE	18402	Disadvantaged Business Enterprises: Supportive Services for a Business Development Program		ALDOT
Amirkhanin, Armen	CCEE	18404	Characterization of Bases and Subbases for AASHTO ME Pavement Design	X	ALDOT
Atkison, Travis	CS	18407	Enhanced Traffic Signal Performance Measures (Pooled Fund)		Purdue University/USDOT
Atkison, Travis	CS	19401	Alabama Connected Vehicle Application Research		ALDOT/USDOT
Graettinger, Andrew	CCEE	18409	Development of AL-Specific Safety Performance Functions for Intersections		ALDOT/USDOT
Hainen, Alex	CCEE	15411	Tuscaloosa Traffic Signal Optimization	X	ALDOT
Hainen, Alex	CCEE	16402	Short Term – Quick Turnaround Services to Facilitate West Central Region Studies	X	ALDOT
Hainen, Alex	CCEE	18401	Using Tensor Flow for Traffic Monitoring in West Central Alabama	X	ALDOT

UA Faculty Working on UTCA Projects – *continued*

Faculty	Dept.	Project ID	Project Title	PI	Fund Source
Hainen, Alex	CCEE	18403	Using ALGO Traffic Data to Improve Traffic Incident Management	X	ALDOT/USDOT
Hainen, Alex	CCEE	18409	Development of Alabama Specific Safety Performance Functions for Intersections		ALDOT/USDOT
Hainen, Alex	CCEE	19401	Alabama Connected Vehicle Application Research	X	ALDOT/USDOT
Johnson, Erik	Business	18401	Using Tensor Flow for Traffic Monitoring in West Central Alabama		ALDOT
Jones, Steven	CCEE	17405	AL Highway Performance Monitoring System Data Synthesis & Analysis – Safety Planning Models in Support of Safety Programs	X	ALDOT/USDOT
Jones, Steven	CCEE	18403	Using ALGO Traffic Data to Improve Traffic Incident Management		ALDOT/USDOT
Jones, Steven	CCEE	18406	Alabama Transportation Data Research and Reporting Program	X	ALDOT/USDOT
Jones, Steven	CCEE	18408	Regional Implementation of the Strategic Highway Safety Plan	X	ALDOT/USDOT
Jones, Steven	CCEE	18409	Development of Alabama Specific Safety Performance Functions for Intersections		ALDOT/USDOT
Lindly, J.	CCEE	15411	Tuscaloosa Traffic Signal Optimization		ALDOT
Lindly, J.	CCEE	16402	Short Term – Quick Turnaround Services to Facilitate West Central Region Studies		ALDOT
Lindly, J.	CCEE	18101	Summer Transportation Conference 2018 – Mobile, AL	X	UA VPR/ATI
Lindly, J.	CCEE	18402	Disadvantaged Business Enterprises: Support Services for Business Development Program	X	ALDOT/USDOT

UA Faculty Working on UTCA Projects – *continued*

Faculty	Dept.	Project ID	Project Title	PI	Fund Source
Liu, Jun	CCEE	18102	Preparing Small Cities for Shared Mobility with Autonomous Vehicles: A Case Study of Tuscaloosa, AL Area	X	UA VPR/ATI
Liu, Jun	CCEE	18409	Development of Alabama Specific Safety Performance Functions for Intersections	X	ALDOT/USDOT
Smith, R.	CS	17405	AL Highway Performance Monitoring System Data Synthesis & Analysis – Safety Planning Models in Support of Safety Programs		ALDOT/USDOT
Smith, R.	CS	18403	Using ALGO Traffic Data to Improve Traffic Incident Management		ALDOT/USDOT
Smith, R.	CS	18408	Regional Implementation of the Strategic Highway Safety Plan		ALDOT/USDOT
Smith, R.	CS	18409	Development of AL-Specific Safety Performance Functions for Intersections		ALDOT/USDOT
Song, W.	CCEE	16405	Development of Cracking Condition Assessment System for Concrete Bridge Decks Using Image Processing Techniques	X	ALDOT/USDOT
Song, W.	CCEE	18405	Condition Assessment of Steel Box Girder Bridge Using Long-Term Field	X	ALDOT/USDOT

UA Research Engineers and/or Post-Doctoral Associates Working on UTCA Projects/Activities during 4/1/18 - 3/31/19

Research Eng/ Post Doc	Dept.	Project ID	Project Title	Fund Source
Adanu, Emmanuel	ATI	18409	Development of Alabama Specific Safety Performance Functions for Intersections	ALDOT/USDOT
Burdette, Steven	CS	15411	Tuscaloosa Traffic Signal Optimization	ALDOT
Lidbe, Abhay	ATI	18101	Summer Transportation Conference 2018 - Mobile, AL	UA VPR/ATI
Lidbe, Abhay	ATI	18409	Development of Alabama Specific Safety Performance Functions for Intersections	ALDOT/USDOT
McNamara, Maggie	ATI	18101	Summer Transportation Conference 2018 - Mobile, AL	UA VPR/ATI
McNamara, Maggie	ATI	18403	Using ALGO Traffic Data to Improve Traffic Incident Mgt.	ALDOT/USDOT
Tedla, Elsa	ATI	15411	Tuscaloosa Traffic Signal Optimization	ALDOT
Tedla, Elsa	ATI	17405	AL Highway Performance Monitoring System Data Synthesis & Analysis - Safety Planning Models in Support of Safety Programs	ALDOT/USDOT
Tedla, Elsa	ATI	18406	Alabama Transportation Data Research and Reporting Program	ALDOT/USDOT
Tedla, Elsa	ATI	18408	Regional Implementation of the Strategic Highway Safety Plan	ALDOT/USDOT

Occasional Pay Police Officers	Dept.	Project ID	Project Title	Fund Source
Hallman, Billy	CCEE	15411	Tuscaloosa Traffic Signal Optimization	ALDOT

c. UA Graduate Students Working on UTCA Projects/Activities during 4/1/18 – 3/31/19

GRA	Dept.	Project ID	Project Title	Fund Source
Adams, J.P.	CCEE	18405	Condition Assessment of Steel Box Girder Bridge Using Long-Term Field	ALDOT/USDOT
Biglari, S.	CCEE	18406	Alabama Transportation Data Research and Reporting Program	ALDOT/USDOT
Foust, P.	CCEE	16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	ALDOT
Foust, P.	CCEE	16410	Driven Precast Prestressed Pile design and Construction Optimization	ALDOT
Fu, Xing	CCEE	18102	RG14871 – Preparing Small Cities for Shared Mobility with Autonomous Vehicles: A Case Study of Tuscaloosa, AL Area.	ATI/RG14871
Fu, Xing	CCEE	18409	Development of AL-specific Safety Performance Functions for Intersections.	ALDOT/USDOT
Gould, Emily	CCEE	16410	Driven Precast Prestressed Pile design and Construction Optimization	ALDOT
Hossain, MK	CCEE	16410	Driven Precast Prestressed Pile design and Construction Optimization	ALDOT
Islam, Naima	CCEE	15411	Tuscaloosa Traffic Signal Optimization	ALDOT
Islam, Naima	CCEE	18403	Using ALGO Traffic Data to Improve Traffic Incident Mgt.	ALDOT/USDOT
Kellogg, Mary	CCEE	18404	Characterization of Bases and Subbases for AASHTO ME Pavement Design	Tri-County Technical College/USDOT
Ronanki, V.	CCEE	16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	ALDOT

UA Graduate Students Working on UTCA Projects – *continued*

GRA	Dept.	Project ID	Project Title	Fund Source
Talukder, S.	CCEE	15411	Tuscaloosa Traffic Signal Optimization	ALDOT
Talukder, S.	CCEE	18407	Enhanced Traffic Signal Performance Measures	Purdue Univ/USDOT
Zhou, S.	CCEE	16405	Development of Cracking Condition Assessment System for Concrete Bridge Decks Using Image Processing Techniques	ALDOT/USDOT
Zhou, S.	CCEE	16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	ALDOT

d. UA Undergraduate Students Working on UTCA Projects/Activities during 4/1/18 – 3/31/19

Undergrad	Dept.	Project ID	Project Title	Fund Source
Heim, Nathan	CCEE	16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	ALDOT
Heim, Nathan	CCEE	16410	Driven Precast Prestressed (PPC) Pile Design and Construction Optimization.	ALDOT
Maue, N.A.	CCEE	16409	Effect of Pile Embedment Length on the Connection Behavior and Precast pile Footing	ALDOT
Maue, N.A.	CCEE	16410	Driven Precast Prestressed (PPC) Pile Design and Construction Optimization	ALDOT
Miller, Aaron	CCEE	15414	Friction and Texture Retention of Concrete Pavements	Portland Cement/ALDOT
Skinner, Leete	CS	18407	Enhanced Traffic Signal Performance Measures	Purdue Univ/USDOT
Willis, G.	CCEE	16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	ALDOT
Willis, G.	CCEE	16410	Driven Precast Prestressed (PPC) Pile Design and Construction Optimization	ALDOT

Internal Collaborations

UTCA is housed in the Department of Civil, Construction, and Environmental Engineering (CCEE) at UA. The table below indicates other UA units (including other non-transportation civil engineering faculty) that participated in UTCA projects during 4/1/18 – 3/31/19.

Project ID	Project Title	PI/Co-PIs	Dept.	Title
15414	Friction and Texture Retention of Concrete Pavements	Amirkhanian, A.	CCEE	Assistant Professor, Civil, Construction & Env. Eng.
16405	Development of Cracking Condition Assessment System for Concrete Bridge Decks Using Image Processing Techniques	Song, W.	CCEE	Assistant Professor, Civil, Construction & Env. Eng
16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	Aaleti, S.	CCEE	Assistant Professor, Civil, Construction & Env. Eng
16410	Driven Precast Prestressed (PPC) Pile Design and Construction Optimization	Aaleti, S.	CCEE	Assistant Professor, Civil, Construction & Env. Eng
17405	AL Highway Performance monitoring System Data Synthesis & Analysis - HPMS Data into Safety	Smith, Randy	CS	Associate Professor, Computer Science
18101	Summer Transportation Conference 2019, Mobile, AL	Lindly, Jay	CCEE	Professor, Civil, Construction & Env. Eng. & UTCA Director
18401	Using TensorFlow for Traffic Monitoring in West Central Alabama	Johnson, Erik	BS	Assistant Professor, Business

Internal Collaborations - continued

Project ID	Project Title	PI/Co-PIs	Dept.	Title
18402	Disadvantaged Business Enterprises: Support Services for a Business Development Program	Amirkhanian, A.	CCEE	Assistant Professor, Civil Construction & Env. Eng.
18403	Using ALGO Traffic Data to Improve Traffic Incident Management	Smith, Randy	CS	Associate Professor, Computer Science
18404	Characterization of Bases and Subbases for AASHTO ME Pavement Design	Amirkhanian, A.	CCEE	Assistant Professor, Civil, Construction & Env. Eng.
18405	Condition Assessment of Steel Box Girder Bridge Using Long-Term Field	Song, Wei	CCEE	Assistant Professor, Civil, Construction and Env. Eng.
18407	Enhanced Traffic Signal Performance Measures	Atkison, T.	CS	Assistant Professor, Civil, Construction & Env. Eng.
18408	Regional Implementation of the Strategic Highway Safety Plan	Smith, Randy	CS	Associate Professor, Computer Science
18408	Regional Implementation of the Strategic Highway Safety Plan	Tedla, Elsa	ATI	Research Engineer
18409	Development of AL-Specific Safety Performance Functions for Intersections	Graettinger, A.	CCEE	Associate Professor, Civil, Construction & Eng. Eng.
18409	Development of AL-Specific Safety Performance Functions for Intersections	Smith, Randy	CS	Associate Professor, Computer Science
18409	Development of AL-Specific Safety Performance Functions for Intersections	Tedla, Elsa	ATI	Research Engineer

Internal Collaborations - continued

Project ID	Project Title	PI/Co-PIs	Dept.	Title
19401	Alabama Connected Vehicle Application Research	Atkison, T.	CS	Assistant Professor, Civil, Construction & Env. Eng.

External Collaborations

The table below indicates individuals and organizations outside UA that participated in UTCA projects during 4/1/18 – 3/31/19. Many of the collaborations reflect agencies that funded UTCA projects; other collaborations came in the form of external groups that were subcontractors and/or provided professional services to UTCA projects.

Project ID	Project Title	PI	Organizations
15411	Tuscaloosa Traffic Signal Optimization	Hainen, A.	ALDOT, funding Sub - Temple, Inc.
15414	Friction and Texture Retention of Concrete Pavements	Amirkhanian, A.	ALDOT, funding Portland Cement Association, funding Sub - University of TX - Austin
16402	Short Term – Quick Turnaround Services to Facilitate West Central Region Studies	Hainen, A.	ALDOT, funding Traffic Data, LLC – Professional Services
16405	Developing of Cracking Condition Assessment System for Concrete Bridge Decks Using Image Processing Techniques	Song, W.	ALDOT/USDOT, funding
16409	Effect of Pile Embedment Length on the Connection Behavior and Precast Pile Footing	Aaleti, S.	ALDOT, funding
16410	Driven Precast Prestressed (PPC) Pile Design and Construction Optimization	Aaleti, S.	ALDOT, funding The University of South Alabama
17401	Advanced Roundabout Design Training	Jones, S.	ALDOT, funding Gresham, Smith and Partners, Prof. Sacs. NE Roundabouts - Sub

External Collaborations - continued

Project ID	Project Title	PI	Organizations
17405	AL Highway Performance Monitoring System Data Synthesis & Analysis – Safety Planning	Jones, S.	ALDOT/USDOT, funding Sub – Southern Traffic Services Sub - UAH
18401	Using TensorFlow for Traffic Monitoring in West Central Alabama	Hainen, A.	ALDOT, funding
18402	Disadvantaged Business Enterprises: Support Services for a Business Development Program	Lindly, J.	ALDOT, funding Sub - AL A&M University JMA Enterprises – Professional Services Encypro Corp. – Professional Services
18403	Using ALGO Traffic Data to Improve Traffic Incident Management	Hainen, A.	ALDOT/USDOT, funding
18404	Characterization of Bases and Subbases for AASHTO ME Pavement Design	Amirkhanian, A.	Tri-County Technical College/SCDOT, funding
18405	Condition Assessment of Steel Box Girder Bridge Using Long-Term Field	Song, W.	ALDOT/USDOT, funding
18406	Alabama Transportation Data Research and Reporting Program	Jones, S.	ALDOT/USDOT, funding Sub – Southern Traffic Services
18407	Enhanced Traffic Signal Performance Measures	Hainen, A.	Purdue University/USDOT, funding

External Collaborations - continued

Project ID	Project Title	PI	Organizations
18408	Regional Implementation of the Strategic Highway Safety Plan	Jones, S.	ALDOT/USDOT, funding Sub - Cambridge
18409	Development of AL-Specific Safety Performance Functions for Intersections	Liu, J.	ALDOT/USDOT, funding Sub - UAH
19401	Alabama Connected Vehicle Application Research	Hainen, A.	ALDOT/USDOT, funding

The University of Alabama
University Transportation Center for Alabama
Proposals Submitted
Submitted Between: 4/1/18 - 3/31/19

<u>Proposal #</u>	<u>Name</u>	<u>Role</u>	<u>Share</u>	<u>Sponsor</u>	<u>Proposal Title</u>	<u>Date Submitted</u>	<u>Project Type</u>	<u>Status</u>	<u>Proposed Amount</u>
18-0688	Hainen, Alex	PI	1.00	TRB	Guide for Behavioral Traffic Safety Messaging on Variable Message Signs	5/7/2018	Research-Basic	Submitted	349,948
18-0786	Hainen, Alex	PI	0.50	Purdue University	Enhancements to Traffic Signal Hi Resolution Data Logger Enumerations	5/29/2018	Research-Basic	Funded	45,597
18-0786	Atkison, Travis	Co-PI	0.50	Purdue University	Enhancements to Traffic Signal Hi Resolution Data Logger Enumerations	5/29/2018	Research-Basic	Funded	45,597
18-0787	Tedla, Elsa	PI	0.05	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	9/1/2018	Research-Basic	Funded	18,825
18-0787	Jones, Steven L	Co-PI	0.70	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	9/1/2018	Research-Basic	Funded	263,551
18-0787	Smith, Randy K	Co-PI	0.25	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	9/1/2018	Research-Basic	Funded	94,125
18-0795	Amirkhanian, Armen	PI	1.00	Tri-County Technical College - TCTC	Characterization of Bases and Subbases for AASHTO ME Pavement Design	5/1/2018	Research-Basic	Funded	64,020
18-0848	Nambisan, Shashi	PI	0.15	University of Kentucky	Identifying Policy Approaches to Extending the Safe Mobility of Older Adults	10/1/2018	Research-Basic	Submitted	16,405
18-0848	Penmetsa, Praveena	Co-PI	0.85	University of Kentucky	Identifying Policy Approaches to Extending the Safe Mobility of Older Adults	10/1/2018	Research-Basic	Submitted	92,959
18-0849	Nambisan, Shash	PI	0.15	USDOT	Advanced Connected Transportation Infrastructure and Operations Network	6/18/2018	Research-Basic	Submitted	1,205,100
18-0849	Hainen, Alex	Co-PI	0.25	USDOT	Advanced Connected Transportation Infrastructure and Operations Network	6/18/2018	Research-Basic	Submitted	2,008,501
18-0849	Bittle, Joshua	Co-PI	0.25	USDOT	Advanced Connected Transportation Infrastructure and Operations Network	6/18/2018	Research-Basic	Submitted	2,008,501
18-0849	Balasubramanian, Bharat	Co-PI	0.10	USDOT	Advanced Connected Transportation Infrastructure and Operations Network	6/18/2018	Research-Basic	Submitted	803,400
18-0849	Liu, Jun	Co-PI	0.10	USDOT	Advanced Connected Transportation Infrastructure and Operations Network	6/18/2018	Research-Basic	Submitted	803,400
18-0849	Myers, Laura	Co-PI	0.08	USDOT	Advanced Connected Transportation Infrastructure and Operations Network	6/18/2018	Research-Basic	Submitted	642,720
18-0849	Smith, Randy K	Co-PI	0.07	USDOT	Advanced Connected Transportation Infrastructure and Operations Network	6/18/2018	Research-Basic	Submitted	562,380
18-1012	Hainen, Alex	PI	1.00	ALDOT	West Central Region Traffic Signal Data Collection, Monitoring, and Modeling Research	8/14/2018	Research-Basic	Submitted	99,380
18-1036	Jones, Steven L	PI	1.00	North Dakota State University - NDSU	NCHRP 20-122 Rural Transportation Issues: Research Roadmap	8/2/2018	Research-Basic	Submitted	21,660

The University of Alabama
University Transportation Center for Alabama
Proposals Submitted
Submitted Between: 4/1/18 - 3/31/19

Proposal #	Name	Role	Share	Sponsor	Proposal Title	Date Submitted	Project Type	Status	Proposed Amount
18-1098	Hainen, Alex	PI	0.50	ALDOT	Alabama Connected Vehicle Application Research	9/7/2018	Research-Basic	Funded	132,651
18-1098	Atkison, Travis	Co-PI	0.50	ALDOT	Alabama Connected Vehicle Application Research	43350	Research-Basic	Funded	132,651
18-1113	Liu, Jun	PI	0.50	University of Tennessee	National Institute for Rail Safety Improvements	43374	Research-Basic	Submitted	125,454
18-1113	Penmetsa, Praveena	Co-PI	0.25	University of Tennessee	National Institute for Rail Safety Improvements	43374	Research-Basic	Submitted	62,727
18-1113	Hainen, Alex	Co-PI	0.15	University of Tennessee	National Institute for Rail Safety Improvements	43374	Research-Basic	Submitted	37,636
18-1113	Nambisan, Shashi	Co-PI	0.10	University of Tennessee	National Institute for Rail Safety Improvements	43374	Research-Basic	Submitted	25,091
18-1235	Jones, Steven L	PI	1.00	ALDOT	Alabama Transportation Data Research and Reporti	43361	Research-Basic	Funded	1,797,750
19-0113	Nambisan, Shashi	PI	0.24	USDOT	Automated Railway Profiling Network (ARPNet)	43374	Research-Applied	Submitted	94,333
19-0113	Hudnall, Matthew	Co-PI	0.38	USDOT	Automated Railway Profiling Network (ARPNet)	43374	Research-Applied	Submitted	149,360
19-0113	Penmetsa, Praveena	Co-PI	0.38	USDOT	Automated Railway Profiling Network (ARPNet)	43374	Research-Applied	Submitted	149,360
19-0232	Liu, Jun	PI	0.90	ALDOT	Crash Modification Factor Guidance for Highway Safety Improvement Program in Alabama	43437	Research-Basic	Submitted	32,215
19-0232	Jones, Steven L	Co-PI	0.10	ALDOT	Crash Modification Factor Guidance for Highway Safety Improvement Program in Alabama	43437	Research-Basic	Submitted	3,579
19-0459	Jones, Steven L	PI	1.00	University of South Alabama	Implementation Guidance for Flashing Yellow Arrows for Varying Left Turn Operations by Time-of-Day	43517	Research-Basic	Submitted	43,750
									\$ 11,932,626

The University of Alabama
University Transportation Center for Alabama
Awards
Start Dates: 4/1/18 - 3/31/19

<u>Proposal #</u>	<u>Name</u>	<u>Role</u>	<u>Share</u>	<u>Sponsor</u>	<u>Proposal Title</u>	<u>StartDate</u>	<u>EndDate</u>	<u>Project Type</u>	<u>Award Amt.</u>	<u>GR#</u>	<u>UTCA#</u>
00-1561	Hainen, Alexander	PI	0.60	ALDOT	Using ALGO Traffic Data to Improve Traffic Incident Management	4/1/2018	12/31/2019	Research-Basic	109,003	26510	18403
00-1561	Smith, Randy	Co-PI	0.20	ALDOT	Using ALGO Traffic Data to Improve Traffic Incident Management	4/1/2018	12/31/2019	Research-Basic	36,334	26510	18403
00-1561	Jones, Steven	Co-PI	0.20	ALDOT	Using ALGO Traffic Data to Improve Traffic Incident Management	4/1/2018	12/31/2019	Research-Basic	36,334	26510	18403
18-0259	Song, Wei	PI	1.00	ALDOT	Condition Assessment of Steel Box Girder Bridge Using Long-Term Field Measurements	4/1/2018	9/30/2020	Research-Basic	289,781	26483	18405
18-0406	Lindly, Jay	PI	0.50	ALDOT	Disadvantaged Business Enterprises: Supportive Services for a Business Development Program	4/19/2018	4/18/2019	Public Service	100,081	26456	18402
18-0406	Amirkhanian, Armen	Co-PI	0.50	ALDOT	Disadvantaged Business Enterprises: Supportive Services for a Business Development Program	4/19/2018	4/18/2019	Public Service	100,081	26456	18402
18-0753	Jones, Steven	PI	-	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	-	26863	18409
18-0753	Liu, Jun	Co-PI	0.55	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	188,042	26863	18409
18-0753	Smith, Randy	Co-PI	0.15	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	51,284	26863	18409
18-0753	Graettinger, Andrew	Co-PI	0.15	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	51,284	26863	18409
18-0753	Hainen, Alexander	Co-PI	0.15	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	51,284	26863	18409
18-0753	Lidbe, Abhay	Co-PI	-	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	-	26863	18409
18-0753	Adanu, Emmanuel	Co-PI	-	ALDOT	Development of Alabama-Specific Safety Performance Functions for Intersections	11/27/2018	11/30/2020	Research-Basic	-	26863	18409
18-0786	Hainen, Alexander	PI	0.50	Purdue University	Enhancements to Traffic Signal Hi Resolution Data Logger Enumerations	7/1/2018	8/31/2019	Research-Basic	45,597	26787	18407
18-0786	Atkison, Travis	Co-PI	0.50	Purdue University	Enhancements to Traffic Signal Hi Resolution Data Logger Enumerations	7/1/2018	8/31/2019	Research-Basic	45,597	26787	18407

The University of Alabama
University Transportation Center for Alabama
Awards
Start Dates: 4/1/18 - 3/31/19

<u>Proposal #</u>	<u>Name</u>	<u>Role</u>	<u>Share</u>	<u>Sponsor</u>	<u>Proposal Title</u>	<u>StartDate</u>	<u>EndDate</u>	<u>Project Type</u>	<u>Award Amt.</u>	<u>GR#</u>	<u>UTCA#</u>
18-0787	Tedla, Elsa	PI	0.05	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	11/27/2018	11/30/2020	Research-Basic	18,825	26851	18408
18-0787	Jones, Steven	Co-PI	0.70	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	11/27/2018	11/30/2020	Research-Basic	263,551	26851	18408
18-0787	Smith, Randy	Co-PI	0.25	ALDOT	Regional Implementation of the Alabama Strategic Highway Safety Plan	11/27/2018	11/30/2020	Research-Basic	94,125	26851	18408
18-0795	Amirkhanian	PI	1.00	Tri-County Technical College - TCTC	Characterization of Bases and Subbases for AASHTO ME Pavement Design	6/11/2018	8/31/2019	Research-Basic	64,020	26552	18404
18-1098	Atkison, Travis	PI	0.50	ALDOT	Alabama Connected Vehicle Application Research	3/1/2019	12/31/2020	Research-Basic	131,352	26977	19401
18-1098	Hainen, Alex	PI	0.50	ALDOT	Alabama Connected Vehicle Application Research	3/1/2019	12/31/2020	Research-Basic	131,352	26977	19401
18-1235	Jones, Steven	PI	1.00	ALDOT	Alabama Transportation Data Research and Reporting Program	10/1/2018	9/30/2019	Research-Basic	785,000	26781	18406

\$ 2,592,928

The University of Alabama
University Transportation Center for Alabama
Awards in Force (Continuation)
Ongoing projects that began before 4/1/18

<u>Proposal #</u>	<u>Name</u>	<u>Role</u>	<u>Share</u>	<u>Sponsor</u>	<u>Proposal Title</u>	<u>StartDate</u>	<u>EndDate</u>	<u>Project_Type</u>	<u>Award Amount</u>	<u>GR#</u>	<u>UTCA#</u>
00-1559	Jones, Steven L	PI	0.90	ALDOT	Alabama Highway Performance Monitoring System Data Synthesis and Analysis	10/1/2017	1/31/2020	Research-Applied	903,032	26353	17405
00-1559	Smith, Randy K	Co-PI	0.10	ALDOT	Alabama Highway Performance Monitoring System Data Synthesis and Analysis	10/1/2017	1/31/2020	Research-Applied	106,239	26353	17405
00-1559	Tedla, Elsa	Co-PI	-	ALDOT	Alabama Highway Performance Monitoring System Data Synthesis and Analysis	10/1/2017	1/31/2020	Research-Applied	53,120	26353	17405
00-445	Song, Wei	PI	1.00	ALDOT	Development of Cracking Condition Assessment System for Concrete Bridge Decks Using Image Processing Techniques	8/1/2016	1/31/2020	Research-Applied	309,594	25663	16405
15-0542	Hainen, Alex	PI	0.70	ALDOT	Tuscaloosa Traffic Signal Optimization	10/21/2015	7/1/2020	Research-Basic	2,096,961	25375	15411
15-0542	Lindly, Jay	PI	0.30	ALDOT	Tuscaloosa Traffic Signal Optimization	10/21/2015	7/1/2020	Research-Basic	898,697	25375	15411
15-0579	Amirkhanian, Armen	PI	1.00	ALDOT	Friction and Texture Retention of Concrete Pavements	10/1/2015	3/31/2019	Research-Basic	342,119	25316	15414
15-0801	Aaleti, Sriram	PI	1.00	ALDOT	Effect of Pile Embedment Length	8/1/2016	10/31/2018	Research-Basic	114,599	25568	16409
16-0253	Aaleti, Sriram	PI	1.00	ALDOT	Driven Precast Prestressed Pile Design and Construction Optimization	5/1/2017	6/30/2019	Research-Basic	159,987	25956	16410
16-0674	Hainen, Alex	PI	0.66	ALDOT	Short Term-Quick Turnaround Services to Facilitate West Central Region Studies	8/17/2016	9/30/2018	Research-Basic	127,498	25694	16402
16-0674	Lindly, Jay	PI	0.34	ALDOT	Short Term-Quick Turnaround Services to Facilitate West Central Region Studies	8/17/2016	9/30/2018	Research-Basic	65,681	25694	16402
18-0482	Hainen, Alex	PI	0.50	ALDOT	Using TensorFlow for Traffic Monitoring in West Central Alabama	3/1/2018	1/1/2019	Research-Basic	20,000	26451	18401
18-0482	Johnson, Erik	Co-PI	0.50	ALDOT	Using TensorFlow for Traffic Monitoring in West Central Alabama	3/1/2018	1/1/2019	Research-Basic	20,000	26451	18401
									<u>\$ 5,217,527</u>		

UA Budget Prior Year

In the 4/1/17 – 3/31/18 year, UTCA received \$10,000 from CCEE for partial support of UTCA's Administrative Secretary.

UA Budget Current Year

During the 4/1/2018 – 3/31/2019 year, UTCA received approximately \$15,000 from Alabama Transportation Institute (ATI) for partial support of UTCA's Administrative Secretary. ATI continues to fund UTCA's Administrative Secretary during 4/1/19 – 3/31/2020.

Revenues Generated Prior Year and Projected for Next Year

For the 4/1/2018 – 3/31/2019 cycle, UTCA generated \$2.59M in new awards. UTCA expects even larger awards to be reported in the next Annual Report due to the ACTION project.

Publications

List the transportation research papers published in refereed journals and/or conference proceedings that resulted from projects funded by UTCA. Please list only those papers published during 4/1/18 – 3/31/19. * denotes student author

- Adanu, K., Penmetsa, P., Jones, S., Smith, R. 2018. Gendered Analysis of Fatal Crashes Among Young Drivers in Alabama, USA. *Safety*, 4(3), 29.
- Connell, E., Jones, S., Williams, J. 2018. Human Trafficking and the Transportation Profession: How can we be Part of the Solution. *ITE Journal*, 88(7), 45-49.
- Hainen, A. M., Lindly, J. K., *Harbin, K. B., *Dye, D. C. (in press). Duration Analysis of Emergency Shutdown Incidents Regarding Hazardous Liquid Pipelines. *Journal of Performance of Constructed Facilities*, 33(5).
- Lidbe, A., Tedla, E. Hainen, A., Jones, S. 2018. Feasibility Assessment for Implementing Adaptive Traffic Signal Control: A Case Study. Accepted by the *ASCE Journal of Transportation Engineering*, 45(2).
- Liu, J. and Khattak, A.J., 2018. Are gates at rail grade crossings always safe? Examining motorist gate-violation behaviors using path analysis. *Transportation research part F: traffic psychology and behavior*, 55, pp.314-324.
- Liu, J., Khattak, A.J., Chen, C., Wan, D., Ma, J. and Hu, J., 2018. Revisiting hit-and-run crashes: a geo-spatial modeling method. *Transportation research record*, 2672(38), pp.81-92.
- Liu, J., Kockelman, K., Nichols, A. (2018). Anticipating the Emissions Impacts of Smoother Driving by Connected and Autonomous Vehicles, Using the MOVES Model. *Smart Transport for Cities & Nations: The Rise of Self-Driving & Connected Vehicles*. www.createspace.com.
- Liu, J., Kockelman, K. (2018). Preparing Data for Modeling Disaggregated Travel Modes: A Tool of Taking Advantages of Existing Travel Models and Open Source Data. *Smart Transport for Cities & Nations: The Rise of Self-Driving & Connected Vehicles*. www.createspace.com.
- Loeb, B., Kockelman, K.M. and Liu, J., 2018. Shared autonomous electric vehicle (SAEV) operations across the Austin, Texas network with charging infrastructure decisions. *Transportation Research Part C: Emerging Technologies*, 89, pp.222-233.
- Penmetsa, P. Adanu, K., Wood, D., Wang, T. Jones, S. 2019. Perceptions and Expectations of Autonomous Vehicles – A Snapshot of Vulnerable Road User Opinion. *Technological Development & Social Change*, 143, 9-13.
- Wali, B., Greene, D.L., Khattak, A.J. and Liu, J., 2018. Analyzing within garage fuel economy gaps to support vehicle purchasing decisions—A copula-based modeling & forecasting approach. *Transportation Research Part D: Transport and Environment*, 63, pp.186-208.

Publications - continued

Zhang, M., Khattak, A.J., Liu, J. and Clarke, D., 2018. A comparative study of rail-pedestrian trespassing crash injury severity between highway-rail grade crossings and non-crossings. *Accident Analysis & Prevention*, 117, pp.427-438.

Presentations

List the transportation research papers presented at academic/professional meetings that resulted from projects funded by UTCA. Please list only those papers presented during 4/1/18 – 3/31/19. * denotes student author

Hainen, A. M., Tom Maze Transportation Seminar, “Traffic Signals and Connected Vehicles”, Iowa State University, Iowa State Institute for Transportation, Ames, IA, United States. (2019).

Hainen, A. M., ALDOT Pre-Construction Conference, “Machine Learning Research for Civil Engineers”, Alabama Department of Transportation, Montgomery Marriott Prattville Hotel and Conference Center at Capitol Hill, Prattville, AL, United States. (April 9, 2019).

Liu, J. & A. Khattak. An Integrated Spatio-Temporal Approach to Examine the Consequences of Driving under the Influence (DUI) in Crashes. TRB Paper # 19-00935. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Liu, J. & S. Jones. Behavioral pathways in bicycle-motor vehicle crashes: From contributing factors, pre-crash actions, to injury severities. TRB Paper # 19-00598. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Liu, J. & S. Jones. Challenging Human Driver Taxis with Shared Autonomous Vehicles: A Case Study of Chicago. TRB Paper # 19-00752. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Liu, J., A. Khattak, J. Ma, & Z. Ling. Examining non-stationary correlates of bicyclist injury severity in traffic crashes: A spatial approach for geo-referenced crash data. TRB Paper # 19-01147. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Liu, J. & A. Khattak. Mapping Location-Based Driving Volatility for Connected and Automated Vehicles. TRB Paper # 18-00825. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Liu, J., A. Hainen & S. Nambisan. Pedestrian injury severity in motor vehicle crashes: An integrated spatio-temporal modeling approach. TRB Paper # 19-01140. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Presentations – continued

Penmetsa, P., *Adanu, K., Wood, D., Teng, A., Jones, S. “What are Vulnerable Road Users’ Expectations and Perceptions on Autonomous Vehicles.” 98th Transportation Research Board (TRB) Annual Meeting, Washington DC, January 13-17, 2019.

Yang, H., G. Zai & J. Liu. Is the front passenger seat always the “death seat”? An application of hierarchical ordered probit model for occupant injury severity. TRB Paper # 19-00944. In: The Transportation TRB Paper # 19-01140. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Yang, H., G. Zai & J. Liu. Is the front passenger seat always the “death seat”? An application of hierarchical ordered probit model for occupant injury severity. TRB Paper # 19-00944. In: The Transportation Research Board 98th Annual Meeting, National Academies, Washington, D.C., 2019.

Patents

None.

Conferences/Workshops/Short Courses Presented

List the transportation seminars, symposia, distance learning classes, etc. you conducted during 4/1/18 – 3/31/19, that resulted from projects funded by UTCA.

“Aggregate polishing testing using the TWPD and DFT”, invited talk at the 21st Pennsylvania Concrete Conference, February 20, 2019, Harrisburg, PA, about 100 attendees, Dr. Armen Amirkhanian.

Lindly, J., Summer Transportation Conference 2018, Mobile, AL, attended by Mobile County middle school teachers, sponsored by the Alabama Transportation Institute, June 5-7, 2018 (13 attendees).

Outreach Activities

Refers to editorial boards of other groups that UTCA personnel served on, any institutes UTCA puts on for underprivileged school and/or high school students, and other outreach activities not previously listed.

Drs. Lindly, Jones, Hainen and Liu teach transportation courses and advise transportation graduate students, in addition to carrying out research. Dr. Turner, who retired in December 2009, has ended his formal teaching and advising duties but continues to be an active member in the community of transportation professionals. The outreach activities of these four individuals are highlighted on the following pages.

Dr. Alex Hainen was active in:

- Gulf Region ITS – Academic Chair
- AFB70 TRB Subcommittee on Utilities – Secretary
- Internal collaboration with Center for Advanced Public Safety
- External collaboration with Purdue University

Other Professional Service:

- AFB70 Standing Committee on Utilities (March 2015 – Present)
- Treasurer, Gulf Region Intelligent Transportation Society, Mandeville, LA. (January 1, 2019 – December 31, 2019)
- Conference Chair/Co-Chair, Gulf Region Intelligent Transportation Society, Tuscaloosa, AL (October 1, 2018 – April 17, 2019)

Dr. Steven Jones has engaged the community of transportation professionals worldwide:

- Editorial Board, *African Geographical Review*
- Editorial Board, *Advances in Transportation Studies*
- Editorial Board, *Journal of Transportation Safety & Security*
- Chair, ASCE Transportation & Development Institute, Public Transport Committee
- Member, World Conference on Transportation Research Society, Urban Transport in Developing Countries Special Interest Group
- Member, World Conference on Transportation Research Society, Transport and Health Special Interest Group,
- Member, International Road Federation, Road Safety Committee, 2016 – present
- Friend, TRB International Cooperation Committee (A0010), 2015 – Present
- Friend, TRB Transportation in the Developing Countries Committee (ABE90), 2009 – Present
- Worked with Center for Advanced Public Safety at UA

Dr. Steven Jones Outreach Activities - continued

- Worked with Department of Geography at UA
- Worked with School of Social Work at UA
- Worked with University of Alabama Huntsville.
- Worked with University of Alabama at Birmingham
- Worked with Cambridge Systematics
- Worked with the Namibia University of Science and Technology
- Worked with Norwich University, Vermont
- PI and or CO-PI on other non UTCA projects:
 - Geodemographic Analyses of AL Crashes – Southeastern Transportation Center
 - An Evidence-based Analysis of Safety Performance Function Development and Calibration – Southeastern Transportation Center
 - Administration of the Southeastern Transportation Center Regional Technology Transfer Program – Southeastern Transportation Center

Dr. Jay Lindly directly participated in outreach in:

- Member, Transportation Research Board “Utilities” Committee AFB70
- Member, Institute of Transportation Engineers
- Collaborated with Alabama Transportation Institute (ATI) on “Summer Transportation Conference” for Middle School Teachers.
 - A three-day workshop in June funded by ATI, for middle-school teachers in Mobile, AL. The teachers were provided with relevant information about transportation systems that they may introduce to their students in the classroom.
- Collaborated with the University of South Alabama (USA)
 - The University of South Alabama (USA) subcontracted to UTCA for “Summer Transportation Conference 2018”, a three-day workshop in June funded by ATI. The workshop introduced middle school teachers to transportation subjects and was held on the South Alabama campus. Dr. Samantha Islam and Dr. John Cleary of USA participated in the event along with UA personnel.

Dr. Jun Liu directly participated in outreach in:

- Editorial Board, Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2019 – date
- Panelist, NCHRP Project Panel 20-102(22) - State and Local Impacts of Automated Freight Transportation Systems, 2019 – date
- Member, TRB Standing Committee on Visualization in Transportation (ABJ 95), 2016 – 2019
- Member, TRB Standing Committee on Geospatial Data Acquisition Technologies (AFB80), 2016 – date
- Collaborated with Center for Advanced Public Safety (CAPS) on Development of Alabama-specific Safety Performance Functions for Intersections
- Collaborated with ALDOT for Development of Alabama-specific Safety Performance Functions for Intersections.
- Collaborated with the National Institute for Rail Safety Improvements/USDOT
- Collaborated with the University of Tennessee/USDOT
- Collaborated with Alabama Transportation Institute (ATI)

Outreach Activities- continued

Dr. Daniel Turner was also active:

Professional Societies:

- Transportation Research Board of the National Research Council of the National Academies
 - Member of TRB Centennial Planning Committee
 - Chair of the Centennial Website Subcommittee
 - Member of the Centennial Fundraising Subcommittee
 - Secured a Centennial Roaming Exhibit for the 2022 Alabama Transportation Conference
- National Council for Examination of Engineers and Surveyors
 - Past President
 - Chair of the Awards Committee
- American Society of Civil Engineers
 - UA Student Chapter Presentation – Careers, Choices and Ethics
- Alabama Board of Licensure for Professional Engineers and Professional Surveyors
 - At the Board’s request, I am planning and developing an online Ethics Seminar and Exam
- American Association of State Highway and Transportation Officials
 - At AASHTO’s request, I am conducting a project to assess the current status of development of the Highway Safety Manual 2nd Ed., and to develop a plan for timely completion.

Other:

- Chaplain, Southern Baptist Disaster Relief Program
- Bible Teacher and Small Group leader, Alberta Baptist Church

Honors and Awards

Dr. Alex Hainen

- The Donald H. McLean Civil Engineering Professor of the Year
- Outstanding Emerging Research

Dr. Steven Jones

- 2019 Excellence in Research and Innovation Award, UA CCE Department
- 2018-2019 Fulbright U.S. Scholar Award, Namibia

Dr. Jun Liu

- The RGC Small Grants Program Award from The University of Alabama for project “Preparing Small Cities for Shared Mobility with Autonomous Vehicles: A Case Study of Tuscaloosa”.

Dr. Daniel Turner

- Elected President of the National Council of Examiners for Engineering and Surveying
- Elected President of the National Council of Examiners for Engineering and Surveying
- Honored with an Alabama Senate Resolution celebrating his achievements in education and his accomplishments in transportation research and technology transfer.

Minutes of Center Meetings

N/A

Other Information

UTCA ends this reporting cycle in a strong position to continue its theme of Management and Safety of Transportation Systems.

UTCA is pleased to have been a leading partner in the successful, \$16M, FHWA-funded ACTION project (awarded after this reporting cycle) to transform traffic operations in West Alabama and provide leading-edge research to address societal transportation needs. UTCA has desired for several years to increase its federal funding, and this project is significant for its funding source.

The hiring of Dr. Jun Liu into the Civil, Construction, and Environmental Engineering Department in August 2018 brings significance because it increases faculty in one of UA's research thrust areas: Transportation. Since his hiring date in August 2018, Dr. Liu has been associated with new awards from ALDOT and Georgia DOT as well as with the ACTION project.

UTCA Associate Director Dr. Steven Jones was awarded a Fulbright Fellowship for the 2019 calendar year. His year-long stay in Namibia furthers his plans to perform transformative research in the area of transportation safety in developing nations.