

Part I: University Transportation Program-Wide Performance Indicators

UTC Name: Center for Connected and Automated Transportation

University: University of Michigan

Grant #: 69A3551747105

Reporting Period: October 1, 2019 - September 30, 2020

OSTR Goals

METRIC	Research Performance Measures	Consortium Total	University of Michigan	Purdue University	University of Illinois Urbana Champaign	Washtenaw Community College	University of Akron	Central State University
1. Number of transportation-related courses offered during the reporting period that were taught by faculty and/or teaching assistants who are associated with the UTC.	Undergraduate courses	14	2	4	6	0	2	0
	Graduate courses	19	6	8	3	0	2	0
2. Number of students participating in transportation research projects during the reporting period funded by this grant.	Undergraduate students in research	8	3	3	0	0	2	0
	Graduate students in research	41	11	20	6	0	4	0
3. Number of transportation-related advanced degree programs that utilize grant funds during the reporting period to support graduate students.	Masters level programs	13	3	7	2	0	1	0
	Doctoral level programs.	15	1	10	3	0	1	0
4. Number of students supported by this grant during the reporting period.	Undergraduate degrees	7	2	3	0	0	2	0
	Masters degrees	13	3	7	2	0	1	0
	Doctoral degrees	37	21	10	5	0	1	0
5. Number of students supported by this grant who received degrees during the reporting period.	Undergraduate degrees	2	1	0	0	0	1	0
	Masters degrees	3	1	0	2	0	0	0
	Doctoral degrees	3	1	1	1	0	0	0
6. Number and total dollar value of research projects selected for funding during the reporting period using UTC grant funds (Federal and/or Recipient Share) that you consider to be applied research and advanced research.	Number of applied research projects	6	0	1	3	0	1	1
	Dollar value of applied research projects	\$1,193,239	\$0	\$150,000	\$843,371	\$0	\$150,000	\$49,868
	Number of advanced research projects	6	5	1	0	0	0	0
	Dollar value of advanced research projects	\$2,555,349	\$1,815,349	\$740,000	\$0	\$0	0	\$0

Part II: CCAT UTC Specific Performance Indicators

UTC Name: Center for Connected and Automated Transportation
 University: University of Michigan
 Grant #: 69A3551747105
 Reporting Period: October 1, 2019 - September 30, 2020

Technology Transfer Goals

1. OUTPUTS	Research Performance Measures	Consortium Total	University of Michigan	Purdue University	University of Illinois Urbana Champaign	Washtenaw Community College	University of Akron	Central State University
1.A. Disseminate research results through publications, conference papers, and policy papers	Technical reports	18	6	6	5	0	1	0
	Papers at conferences, symposia, workshops, and meetings	111	45	49	6	0	5	6
	Peer-reviewed journal articles	40	13	21	6	0	0	0
1.B. Develop inventions, new methodologies, or products	Annual number of research deployments	5	3	2	0	0	0	0
1.C. Research projects funded by sources other than UTC and matching fund sources	Number of projects	21	12	7	2	0	0	0
	Dollar amount of projects	\$4,262,007	\$2,707,263	\$734,744	\$820,000	\$0	\$0	\$0
2. OUTCOMES	Research Performance Measures							
2.A. Incorporate new technologies, techniques or practices	Number of technology transfer activities that offer implementation or deployment guidance	21	6	14	0	0	1	0
2.B. Improve the processes, technologies, techniques in addressing transportation issues	Number of research deliverables disseminated from each research project	57	7	45	3	0	0	2
3. IMPACTS	Research Performance Measures							
3.A. Increase the body of knowledge and safety of the transportation system	Number of instances of technology adoption or commercialization	3	2	1	0	0	0	0
	Number of conferences organized by the CCAT consortium members	19	15	1	2	0	1	0
3.B. Improve the operation and safety of the transportation system	Number of instances of research changing behavior, practices, decision making, policies (including regulatory policies), or social actions	4	1	1	0	0	2	0

Leadership Development Goals

1. OUTPUTS	Research Performance Measures							
1.A Keynote speeches or invited speaker presentations	Number of media engagements	26	6	0	6	14	0	0
	Number of academic engagements	738	707	0	19	12	0	0
	Number of industry engagements	740	701	0	9	30	0	0
2. OUTCOMES	Research Performance Measures							
2.A Leadership positions held	Regional organizations	19	2	0	3	14	0	0
	National organizations	17	1	3	6	5	0	2
	International organizations	10	3	1	5	1	0	0
2.B CCAT affiliated students holding leadership positions	Number of students	44	6	1	1	33	1	2

Education and Workforce Development Goals

1. OUTPUTS	Research Performance Measures							
1.A Number of Workforce Online learning modules created and developed toward the certification of completion training for the emerging CAT field technician	Number of learning modules	19	2	0	1	16	0	0
1.B Development of Articulation agreements for C++ software programs and Applied Data Science program with partner institutions	Number of Articulation/Transfer Programs	4	0	0	0	4	0	0
1.C Development of an active WCC Pre-Engineering Program in STEM disciplines leading to an AAS degree	Number of students completed Associates Degree for Pre-Engineering Science Transfer	28	0	0	0	28	0	0
	Number of students completed Associates Degree for Engineering Technologist-Manufacturing Degree	2	0	0	0	2	0	0
1.D Number of curriculum development and professional development activities for instructors in related CAT technologies	Number of Professional Dev. Activities in IT [CAT]	20	0	2	0	18	0	0
	Number of participants	57	0	19	0	38	0	0
1.E Number of K-12 Career pathways activities related to CAT career fields.	Number of K-12 Activities in CAT Career Areas	14	0	0	1	13	0	0
	Number of participants	9406	0	0	0	9406	0	0

Outreach Goals

1. OUTPUTS	Research Performance Measures							
1.A Media stories referencing CCAT, CCAT research or other	Number of media stories	34	12	0	8	14	0	0
	Number of newsletters	10	5	1	2	2	0	0
	Number of press releases	3	0	0	0	3	0	0
1. B Newsletters, press releases, and website	Number of website hits	43303	9950	30	31872	1451	0	0
2. OUTCOMES	Research Performance Measures							
2.A Research Champions	Industry principals	9	2	7	0	0	0	0
	Number of industries represented	9	2	7	0	0	0	0
	Government principals	13	2	7	4	0	0	0
	Number of government agencies represented	9	2	7	0	0	0	0

Collaboration Goals

1. OUTPUTS	Research Performance Measures							
1. A Collaboration with other agencies	Number of agencies providing matching funds	10	1	7	2	0	0	0
	Number of agencies participating in CCAT events	24	10	8	6	0	0	0
	Number of agencies committed to CCAT projects	11	3	7	1	0	0	0
	Number of individuals from external agencies attending CCAT events	303	292	5	6	0	0	0
1. B Collaboration with other organizations	Number of organizations providing matching funds	24	3	17	2	0	2	0
	Number of organizations participating in CCAT events	165	101	19	6	39	0	0
	Number of organizations committed to CCAT Projects	70	7	21	0	39	3	0
	Number of individuals from external organizations attending CCAT events	3313	3076	17	6	214	0	0