

Michigan
Technological
University

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Create the Future

Year Ended
June 30, 2014

Single Audit Act
Compliance

MICHIGAN TECHNOLOGICAL UNIVERSITY

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INDEPENDENT AUDITORS' REPORT ON THE
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
REQUIRED BY OMB CIRCULAR A-133

October 15, 2014

To the Board of Control
Michigan Technological University
Houghton, Michigan

We have audited the financial statements of *Michigan Technological University* (the "University"), as of and for the year ended June 30, 2014, and the related notes to the financial statements, which collectively comprise the University's basic financial statements. We issued our report thereon dated October 15, 2014, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by OMB Circular A-133 and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditure of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

A handwritten signature in black ink that reads "Rehmann Lobson LLC". The signature is written in a cursive, flowing style.

MICHIGAN TECHNOLOGICAL UNIVERSITY

Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Student Financial Assistance Cluster				
U.S. Department of Education				
Federal Supplemental Educational Opportunity Grants	84.007	Direct	P007A132046	\$ 234,626
Federal Work-Study Program	84.033	Direct	P033A132046	284,286
Federal Perkins Loan Program	84.038	Direct	-n/a-	2,078,349
Federal Pell Grant Program	84.063	Direct	P063P130234	5,715,100
Federal Direct Student Loans	84.268	Direct	P268K130234	28,914,942
Total Student Financial Assistance Cluster				37,227,303
Research and Development Cluster				
U.S. Department of Agriculture				
No CFDA Number:				
USAGR-ESC-FFC-Impacts of Reburns	10.unk	Direct	11-CS-11221633-154	16,888
USAGR-FFC-ESC-Climate Change Plan	10.unk	Direct	12-CR-11242306-131	1,634
USAGR-FFC-ESC-Fire Impct Wood Dcomp	10.unk	Direct	08-JV-11221633-222	(994)
USAGR-ESC-FFC-Carbon H2O & Soils	10.unk	Direct	09-CR-11242306-048	195
USAGR-ESC-FFC-Nat'l Soil Carbon Net	10.unk	Direct	09-CR-11242306-086	51,154
USAGR-ESC-FFC-Peatlands Env Chg	10.unk	Direct	09-JV-11242306-087	29,127
USAGR-ESC-FFC-North Eco Experiment	10.unk	Direct	10-JV-11242313-051	(319)
USAGR-ESC-FFC-Marcell Exp Forest	10.unk	Direct	10-JV-11242307-067	3,781
Cooperative Management of Archaeology	10.unk	Direct	10-CS-11091000-022	116
USAGR-FFC-ESC Soil Survey Methods	10.unk	Direct	10-JV-11242305-119	9,541
USAGR-ESC-FFC Peatland Rsh Houghtn	10.unk	Direct	02-JV-11231300-084	2,959
USAGR-ESC-FFC-Black Ash Wetlands	10.unk	Direct	11-CS-11090100-006	113,784
USAGR-ESC-FFC-Fire Management Natur	10.unk	Direct	11-JV-11221633-078	5,835
USAGR-ESC-FFC-Native Plant Prod Res	10.unk	Direct	11-JV-11221632-130	48,102
USAGR-ESC-FFC-Pile Burning in US	10.unk	Direct	11-JV-11221633-160	49,496
USAGR-CWS2-Sand Accumln Lk Superior	10.unk	Direct	11-CR-11242307-107	18,025
USAGR-ESC-FFC-Wood Stake Decomp.	10.unk	Direct	11-JV-11242301-081	7,985
USAGR-GIS Interface WEPP Watershed	10.unk	Direct	12-JV-11221634-175	7,277
USAGR-ESC-FFC-Instruct Climate	10.unk	Direct	12-JV-11242306-130	1
USAGR-ESC-FFC-Environmental Change	10.unk	Direct	12-JV-11242306-105	33,573
USAGR-ESC-FFC-Tropical Ecosystems	10.unk	Direct	13-JV-11242306-044	169,489
USAGR-Fire Emissions Inventory Tool	10.unk	Direct	13-JV-11261987-071	16,434
USAGR-ESC-FFC-Carbon Rsch Management	10.unk	Direct	13-CR-11242306-065	1,317
USAGR-FlamMap Model Complement	10.unk	Direct	13-JV-11221634-135	1,434
USAGR-ESC-FFC-Puerto Rican Forest	10.unk	Direct	13-JV-11120101-033	43,759
USAGR-ESC-FFC-Trapping Success Yr1	10.unk	Direct	13-PA-11020000-060	51,305
USAGR-ESC-FFC-Wood Decomposition	10.unk	Direct	13-JV-11330140-120	7,743
USAGR-ESC-FFC-Biomass Removal	10.unk	Direct	14-JV-11221633-021	14,989
USAGR-ESC-FFC-Pile Burning on Wood	10.unk	Direct	14-JV-11221633-035	12,356
USAGR-Multi-Temporal Imagery	10.unk	Direct	14-CS-11090700-005	961
USAGR-FFC-ESC-Properties of Ironwood	10.unk	Direct	12-JV-11111133-059	4,317
				<u>722,264</u>
Cooperative Forestry Research:				
USAGR-MS-FFC-FY12 Admin	10.202	Direct	2012-32100-06098	11,611
USAGR-MS-FFC-Wildland Fire	10.202	Direct	2013-32100-06098	4,503
USAGR-MS-FFC-ESC-Foliar	10.202	Direct	2013-32100-06098	2,330
USAGR-MS-FFC-Perennial Bio	10.202	Direct	2013-32100-06098	1,194
USAGR-MS-FFC-BRC-Wood Cell	10.202	Direct	2013-32100-06098	1,111
USAGR-MS-FFC-Wood Decay	10.202	Direct	2013-32100-06098	3,792
USAGR-MS-FFC-ESC-Farmland	10.202	Direct	2013-32100-06098	3,087
USAGR-MS-FFC-ESC-Climatic	10.202	Direct	2013-32100-06098	3,135
USAGR-MS-FFC-ESC-Peatlands	10.202	Direct	2013-32100-06098	1,325
USAGR-MS-FFC-Bio Hotspots	10.202	Direct	2013-32100-06098	1,808
USAGR-MS-FFC-Carbon Store	10.202	Direct	2013-32100-06098	(93)
USAGR-MS-FFC-Butterfly	10.202	Direct	2013-32100-06098	3,421
USAGR-MS-FFC-BRC-Quercus	10.202	Direct	2013-32100-06098	388
USAGR-MS-FFC-Forest Health	10.202	Direct	2013-32100-06098	6,825
USAGR-MS-FFC-Ethanol	10.202	Direct	2013-32100-06098	(942)
USAGR-MS-FFC-ESC-N Forests	10.202	Direct	2013-32100-06098	925
USAGR-MS-FFC-Tree Growth	10.202	Direct	2013-32100-06098	4,830
USAGR-MS-FFC-ESC-Wolf Pop	10.202	Direct	2013-32100-06098	4,894
USAGR-MS-FFC-Sugar Maple	10.202	Direct	2013-32100-06098	3,224
USAGR-MS-FFC-ESC-Wildfire	10.202	Direct	2013-32100-06098 AMEND. NO.1	6,978
USAGR-MS-FFC-ESC-Hawaiian	10.202	Direct	2013-32100-06098	(371)
USAGR-MS-FFC-ESC-Climate	10.202	Direct	2013-32100-06098	3,311
USAGR-MS-FFC-FY13 Admin	10.202	Direct	2013-32100-06098 AMEND. NO.1	74,625
USAGR-MS-FFC-ESC-Wetlands	10.202	Direct	2013-32100-06098 AMEND.NO.1	7,806

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Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Research and Development Cluster (Continued)				
U.S. Department of Agriculture (Concluded)				
Cooperative Forestry Research (Concluded):				
USAGR-MS-FFC-ADV ACCT-Admin FY14	10.202	Direct	ADVANCE ACCOUNT	\$ 1,304
USAGR-MS-FFC-ESC-ADV ACCT-Carbon	10.202	Direct	ADVANCE ACCOUNT	4,640
USAGR-MS-FFC-ESC-ADV ACCT-Thermal	10.202	Direct	ADVANCE ACCOUNT	7,000
USAGR-MS-FFC-ADV ACCT-Perennial	10.202	Direct	ADVANCE ACCOUNT	7,135
USAGR-MS-FFC-BRC-ADV ACCT-Biomass	10.202	Direct	ADVANCE ACCOUNT	5,414
USAGR-MS-FFC-ESC-ADV ACCT-Ungulates	10.202	Direct	ADVANCE ACCOUNT	6,380
USAGR-MS-FFC-ESC-ADV ACCT-Ethanol	10.202	Direct	ADVANCE ACCOUNT	2,144
USAGR-MS-FFC-ESC-ADV ACCT-SugarMapl	10.202	Direct	ADVANCE ACCOUNT	6,923
USAGR-MS-FFC-ADV ACCT-Mining Forest	10.202	Direct	ADVANCE ACCOUNT	3,066
USAGR-MS-FFC-ESC-ADV ACCT-Trail	10.202	Direct	ADVANCE ACCOUNT	2,935
USAGR-MS-FFC-ESC-ADV ACCT-Nutrient	10.202	Direct	ADVANCE ACCOUNT	7,000
USAGR-MS-FFC-ESC-ADVACCT-Runoff	10.202	Direct	ADVANCE ACCOUNT	3,901
USAGR-MS-FFC-ESC-ADV ACCT-Climate	10.202	Direct	ADVANCE ACCOUNT	3,947
USAGR-MS-FFC-ESC-ADV ACCT-Emissions	10.202	Direct	ADVANCE ACCOUNT	3,023
USAGR-MS-FFC-ESC-ADV ACCT-WolfMoose	10.202	Direct	ADVANCE ACCOUNT	6,148
USAGR-MS-FFC-BRC-ADV ACCT-Red Oaks	10.202	Direct	ADVANCE ACCOUNT	3,802
USAGR-MS-FFC-BRC-ADV ACCT- Genetics	10.202	Direct	ADVANCE ACCOUNT	6,997
USAGR-MS-FFC-ESC-ADV ACCT-Poplar	10.202	Direct	ADVANCE ACCOUNT	4,377
				<u>235,853</u>
Agriculture and Food Research Initiative:				
USAGR-BRC-FFC Root Dev Populus	10.310	Direct	2009-65504-05767	145,166
USAGR-FFC-Overlapping Sense/Antisen	10.310	Direct	2012-67014-19445	73,529
USAGR-FFC-BRC-Lateral OrganBoundary	10.310	Direct	2012-67013-19389	153,410
USAGR-BRC-Rice Callus Culture	10.310	Direct	2014-67018-21767	60,273
				<u>432,378</u>
Biomass Research and Development Initiative Competitive:				
USAGR-SFI-HRJ Fuel	10.312	Direct	59-3620-3-002	55,099
Forest Health Protection:				
Sugar Maple Dieback in the Upper Gr	10.680	Direct	10-DG-11420004-143	8,338
USAGR-ESC-FFC-Ash Trees Tolerance	10.680	Direct	11-DG-11420004-068	15,581
USAGR-ESC-FFC-Ash Mortality in UP	10.680	Direct	11-CA-11420004-331	4,131
USAGR-FFC-Oak Wilt	10.680	Direct	12-DG-11420004-201	(714)
USAGR-ESC-FFC-Oak Wilt 2013Activity	10.680	Direct	DOMESTIC GR 13-DG-11420004-216	50,000
USAGR-ESC-FFC-Wildfire Disturbance	10.680	Direct	13-DG-1142004-269	1,903
				<u>79,239</u>
ARRA-Capital Improvement and Maintenance:				
ARRA - Trails Infra Data Cleanup, Verification	10.687	Direct	10-PA-11094419-074	947
Soil and Water Conservation:				
OREGO-ESC-FFC-Prairie/Chicken Init	10.902	Oregon State University	DA776A-A PRIME 68-7482-12-505	253
Total U.S. Department of Agriculture				
				<u>1,526,033</u>
U.S. Department of Commerce				
No CFDA Number:				
MDEQ-Current Forecasting	11.unk	Michigan Dept of Environmental Quality	14-RIP-002	5,706
UNIVE-Great Lakes Remote Sensing	11.unk	University of Michigan	ADVANCE ACCOUNT	19,850
				<u>25,556</u>
Integrated Ocean Observing System:				
LIIIMO-GLOS DMAC Add'l Funding	11.012	LimnoTech Inc	SUB DMAC-01; PRIME #NA10NOS012	22,863
Sea Grant Support:				
UNIVE-CWS2-Torch Lake Assessment AOC	11.417	University of Michigan	3002230000 MSG #R/WQ-4	17,590
Coastal Zone Management Administration Awards:				
MIDEQ-Mining Impacted Strm	11.419	Michigan Dept of Environmental Quality	PROJECT #12.D-13.02	2,041
MIDEQ-FFC-ESC-Portage Waterway	11.419	Michigan Dept of Environmental Quality	PROJECT #12E-13.01	293
MIDEQ-MTRI-Remote Sens Rip Currents	11.419	Michigan Dept of Environmental Quality	GRANT #13-RIP-002	33,430
REGEN-GLRC-Rip Currents Great Lakes	11.419	Regents of the University of Michigan	SUBCONTRACT NO. 3002561961	55,545
				<u>91,309</u>
Climate and Atmospheric Research:				
USCOM-CWS2-Mgmt Lower Colorado River	11.431	Direct	NA130AR4310126	41,259
National Oceanic and Atmospheric Administration (NOAA):				
Cooperative Institutes:				
UNIVE-GLOS Observing Network	11.432	University of Michigan	3002475304 / NA120AR4320071	226,726
Total U.S. Department of Commerce				
				<u>425,303</u>

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Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Research and Development Cluster (Continued)				
U.S. Department of Defense				
No CFDA Number:				
DARPA-Arctic Phenomena Unatnd Sens	12.unk	Direct	W911QX-13-C-0012	\$ 327,526
DARPA-Adaptive RADAR Countermeasure	12.unk	Direct	HR0011-13-C-0032	306,436
DARPA-CCSR-FNR-Synchronization	12.unk	Direct	HR0011-13-C-0057	90,265
DARPA-Adaptive RADAR Countermeasure	12.unk	Direct	HR0011-13-C-0032 MOD #P00003	1,607,010
DARPA-OPTIMIZED Shared SPECTRUM	12.unk	Direct	HR0011-14-C-0024	381,410
DARPA-Multi-Aperture Imaging	12.unk	Direct	HR0011-14-C-0081	9,675
OFFIC-MuSTI-Study Struc Resp Mat	12.unk	Direct	W911NF-09-2-0026	(1,242)
USAIR-MTRI-Radar Frequency Sensing	12.unk	Direct	FA8750-05-C-0237 P00007	342,975
USAIR-Multi-Domain Intelligence	12.unk	Direct	FA8750-12-C-0032	461,104
USAIR-CCSR-Multi-Sensor Intell	12.unk	Direct	FA8750-12-2-0108	74,885
OFFIC-Super Resolution Reconstruct	12.unk	Direct	FA8750-12-C-0119	159,756
USARM-Antarctica Snow Pavements	12.unk	Direct	W913E5-11-C-0001	783
USARM-Handheld Explosive Hazard	12.unk	Direct	W909MY-13-C-0029	192,978
USARM-Spatial Coherence Imaging	12.unk	Direct	W909MY-13-C-0013	74,906
TACOM-Assured II-Hvy VCM Roller	12.unk	Direct	W56HZV-08-C-0525 WD AMMS-008	13,237
TACOM-SURGE II-High Performance Trck	12.unk	Direct	W56HZV-09-C-0477 MTU-TSS-007	57,130
OFFIC-ASSURED II-Pointman	12.unk	Direct	W56HZV-08-C-0525 MTU-AMMS-022	100,109
OFFIC-SURGE II-HPLWT Phase 4	12.unk	Direct	W56HZV-09-C-0477 P00012	41,189
OFFIC-ASSURED II-SPARK 2 Rake	12.unk	Direct	W56HZV-08-C-0525	164,160
OFFIC-ASSURED-RCV Improvements	12.unk	Direct	W56HZV-08-C-0525 WD-024	527,426
OFFIC-ASSURED-Inline Roller Bank	12.unk	Direct	W56HZV-08-C-0525 WD-023	4,424
OFFIC-ASSURED II-Route Clearance	12.unk	Direct	W56HZV-08-C-0525 WDamms-25	3,312,565
OFFIC-Assured Mobility-Husky Engine	12.unk	Direct	W56HZV-08-C-0525 WD AMMS-017/9	(447)
MISSI-MIMC-FNR-Resource Sharing	12.unk	Mississippi State University	060803-360515.01	99,625
MISSI-APSRC-FNR-IP8 Ignition	12.unk	Mississippi State University	060803.360514.01	31,723
QUANT-MIMC-RMCP-Platform Concepts	12.unk	Quantum Engineering Design Inc	MTU AGMT #1307065	10,713
LEIDO-Oak II	12.unk	Leidos, Inc.	SUBCONTRACT #P010130462	4,809
NATIO-MTRI-Linking NASA Satellite	12.unk	National Institute of Aerospace	X12-7059-MTU-JM	36,170
CRAFT-MuSTI-Transfer Offshore	12.unk	Craft Engineering Associates Inc	PO#Z1101	15,384
LEIDO-MSDD	12.unk	Leidos, Inc.	P010146084	487
ARTEM-GMTI Data Exploitation	12.unk	Artemis Inc.	MTU#1212040	50,000
HELIO-Waveforms & Related Signal Pr	12.unk	Helios Remote Sensing Systems	1105-S01-HRSSI	26,542
GENER-Movint	12.unk	General Dynamics	13-SC-0020 PRIME #12-C-0293	12,300
MATRI-SAR-Aided Navigation Phase 2	12.unk	Matrix Research Inc	PO #2012-0219 SBIR PHASE 2	54,770
MATRI-Bistatic 3dMagi	12.unk	Matrix Research Inc	PO #2013-0354	74,343
LEIDO-Acme	12.unk	Leidos, Inc.	PRIME 12-C-8917 PO10108055	213,296
SYSTE-Mathematical Models	12.unk	Systems Research and Applications Corporation	SUBCONTRACT #SRAS000497	7,214
SYSTE-Wind Mitigation Phase II	12.unk	Systems & Technology Research LLC	SUB#2013-1023/PRIMEFA8650-13-C	91,372
LEIDO-OPERA	12.unk	Leidos, Inc.	TASK ORDER #P010151900-1	69,797
THERM-Mitigate Sensor Saturation	12.unk	Thermoanalytics Inc	TAI-13-0430	46,477
THERM-Mitigate Sensor Saturationthe	12.unk	Thermoanalytics Inc	PRIME #FA8650-14-C-5014	946
CENTE-Support for MCAP Work	12.unk	Center for Automotive Research	W56H2V-11-C-0365 CAR-TSA-ACS	9,043
HELIO-Range/Doppler Straddle	12.unk	Helios Remote Sensing Systems	1120S01-HRSSI W15P7T-12-C-A016	(1,546)
HELIO-Range/Doppler Straddle	12.unk	Helios Remote Sensing Systems	1150-S01-HRSSI	102,106
NORTH-GLRC-FNR-Lake Superior Mining	12.unk	Northrop Grumman Information Systems	SUB#7500114834 US ARMY PRIME	23,436
SCIEN-PILOT-Task 3.3	12.unk	Leidos, Inc.	#P010124681 (PRIME W15P7T-12-C	112,959
UNIVE-IMP-Fabrication Melt Spinning	12.unk	Universal Technical Resource Services Inc	UTRS PO#12-219 #10100.001.0001	18,761
ACADE-IMP-Research Program (REAP)	12.unk	Academy of Applied Science	AWARD 13-38	2,600
ACADE-UNITE/REAP 2013	12.unk	Academy of Applied Science	SUBGRANT NO.13-88	1,900
ACADE-IMP-REAP at Michigan Tech	12.unk	Academy of Applied Science	AWARD 14-21A	948
BATTE-Sr Design-Handheld Sensor	12.unk	Battelle	US001-0000381196	23,641
AKELA-Buried IED Detection	12.unk	AKELA Inc	AK-2012-1101	39,589
QUANT-AIM-RMCD Phase II SBIR	12.unk	Quantum Engineering Design Inc	MTU AGMT #1403009	3,416
LIMNO - Tiffin Watershed Phase II	12.unk	LimnoTech Inc	MTU CO & PO #TIFFIN2012	(516)
				<u>9,430,565</u>
Basic and Applied Scientific Research:				
OFFICE-IMP-Hi St Low Alloy Aluminum	12.300	Direct	N00014-11-1-0876	198,489
USAIR-Photonic Crystal Fiber	12.300	Direct	FA8750-12-1-0136	18,994
OFFIC-Info Recovery Algorithm Comp	12.300	Direct	N00014-13-1-0018	209,343
OFFIC-GLRC-Underwater Glider Fleet	12.300	Direct	N00014-14-1-0032	32,677
PENNS-GLRC-Ocean Basin Impact	12.300	Pennsylvania State University	PRIME N00014-11-1-0619 SA13-05	22,340
				<u>481,843</u>
Basic Scientific Research:				
OFFIC-MIMC-Agile Microgrids	12.431	Direct	W911NF-13-2-0024	182,493

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MICHIGAN TECHNOLOGICAL UNIVERSITY

Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Research and Development Cluster (Continued)				
U.S. Department of Defense (Concluded)				
Air Force Defense Research Sciences Program:				
USAIR-ILI-Oculus-ASR Nanosat Flight	12.800	Direct	FA9550-12-1-0008	\$ 16,393
USAIR-Capstone Design Challenge	12.800	Direct	FA9550-11-1-0207	11,629
OFFIC-MuSTI-Model Hybrid Composites	12.800	Direct	FA9550-13-1-0030	78,141
NATIO-IMP-3D Weld Printing Platform	12.800	National Center for Defense Manufacturing and Machining	FA8650-12-2-7230	158,561
UNIVE-MACEEP-Electric Propulsion	12.800	University of Michigan	3001381267 P2	129,322
UNIVE-CISSIC-Wave Optics Turbulence	12.800	University of Dayton Research Institute	RSC12034	128,168
				<u>522,214</u>
Mathematical Sciences Grants Program:				
NATIO-FNR-Comb Designs/Hamada's Conj	12.901	Direct	H98230-12-1-0213	10,174
Total U.S. Department of Defense				<u>10,627,289</u>
U.S. Department of Housing and Urban Development				
Lead Technical Studies Grants:				
SIROM-BRC-Vetiver Grass	14.902	SIROM Scientific Solutions LLC	MTU CO #1103057	11,073
U.S. Department of Interior				
No CFDA Number:				
USGEO-Algorithms to Map Soil Moisture	15.unk	Direct	G12PX00490	1,976
WISCO-ESC-FFC-Lakeshore Restoration	15.unk	Wisconsin Dept of Natural Resources	PO #NMC00000042, PRO-C-25	(683)
WISCO-ESC-FFC-Ecological Benefits	15.unk	Wisconsin Dept of Natural Resources	PO# NMD00000056	81,259
DUCKS-North Slope Land Cover	15.unk	Ducks Unlimited	US-AK-71-2	4,730
KEWEE-Italian Hall Survey	15.unk	Keweenaw NHP Advisory Commission	CONTRACT DATED 12/20/12	834
HANNA-ESC-FFC-Ash Borer Detection	15.unk	Hannahville Indian Community	AGREEMENT #1306021	9,996
				<u>98,112</u>
Cultural Resource Management:				
USBUR-NSSI-Intergov Website Mtce/Op	15.224	Direct	AGMT NO LAA 08 0008/L08AC14728	92,942
Fish, Wildlife and Plant Conservation Resource Management:				
USBUR-NSSI Intergovernmental Webs	15.231	Direct	SUPPLEMENT NUMBER 0001	27,908
Wildland Fire Research and Studies Program:				
FLORI-ESC-FFC-Black Carbon Formation	15.232	Florida Atlantic University	MRJ06	3,119
ARRA- Environmental Quality and Protection Resource Management:				
USBUR-ARRA-Survey Abandoned Mines	15.236	Direct	L10AC20007	7,999
Science and Technology Projects Related to Coal Mining and Reclamation:				
SOUTH-BRC-Low Cost Green Technology	15.255	Southern Illinois University - Carbondale	AGREEMENT NO. 13-15	40,238
Keweenaw National Historical Park (NHP) Enhancement Grants:				
KEWEE-Archaeology Cliff Mine 2012	15.407	Keweenaw NHP Advisory Commission	C2012-00018	(179)
KEWEE-Cliff Mine Archaeology 2013	15.407	Keweenaw NHP Advisory Commission	AGREEMENT NO. C2013-00014	10,000
KEWEE-Torch Lake Copper Reclamation	15.407	Keweenaw NHP Advisory Commission	AGREEMENT NO. C2013-00015	4,775
				<u>14,596</u>
Fish and Wildlife Management Assistance: Development and Support of the USFW				
	15.608	Direct	30181AJ195 / F10AC00214	70,793
Coastal Program:				
USFIS-Abiotic & Biotic Constraints	15.630	Direct	F12AC01384	38,757
Migratory Bird Conservation:				
USFIS-FFC-ESC Disp Gold Wng Warbler	15.647	Direct	301819G086 / F09AC00107	16,518
USFIS-FFC-ESC-Golden Wing Warb	15.647	Direct	F12AP01005	898
				<u>17,416</u>
Research Grants (Generic):				
USFIS-Selawik Refuge Alaska	15.650	Direct	F12AC01268	22,140
National Fish and Wildlife Foundation:				
NATIO-ESC-Restore Brook Trout	15.663	National Fish and Wildlife Foundation	PROJECT 0901.11.026938	7,434
U.S. Geological Survey Research and Data Collection:				
USGEO-Understand Fish Production	15.808	Direct	G12AC20299	131,852
USGEO-ESC-FFC-Global Warming	15.808	Direct	G14AC00019	13,629
				<u>145,481</u>

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MICHIGAN TECHNOLOGICAL UNIVERSITY

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For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Research and Development Cluster (Continued)				
U.S. Department of Interior (Concluded)				
National Land Remote Sensing-Education				
Outreach and Research:				
AMERI-Michigan View Consort FY13	15.815	AmericaView Inc	SUB-AWARD AGRMT AV08-MI01	\$ 6,150
AMERI-StateView Program Development	15.815	AmericaView Inc	AV13-MI01	9,354
				<u>15,504</u>
National Resource Stewardship:				
USPAR-ESC-FFC-Wolf Moose 2011-16	15.944	Direct	AGRMT# P11AC90808	<u>58,625</u>
Cooperative Research and Training Programs Resources of the National Park System:				
USPAR-MTRI-Lake Bottoms	15.945	Direct	TASK AGMT NO P12AC10449	7,048
USPAR-ESC-FFC-Hurricane River Road	15.945	Direct	COOPERATIVE AGREEMENTP13AC00845	19,355
				<u>26,403</u>
Total U.S. Department of Interior				<u>687,467</u>
U.S. Department of Labor				
Trade Adjustment Assistance Community College and Career Training (TAACCT):				
BAYDE-PLC Education Simulation Game	17.282	Bay de Noc Community College	AGREEMENT DATED 4/2/14	<u>39,054</u>
U.S. Department of Transportation				
No CFDA Number:				
USTRA-Unpaved Road Conditions RS	20.unk	Direct	RITARS-11-H-MTU1	344,251
USTRA-MTTI-High Speed Rail Work	20.unk	Direct	DTRF53-11-C-00030	87,961
USTRA-APS-Locomotive Test	20.unk	Direct	DTRF53-13-P-00136	29,174
KEWEE-Paavola and Boston Pond	20.unk	Keweenaw Land Trust	AWARD DATED 2/4/13	2,532
LANZA-SFI-Waste Gas to Jet Fuel	20.unk	LanzaTech Inc	USDOT-FAA DTRT57-12C-10008	63,314
MITRA-MTTI-FNR-Unmanned Aerial Vehi	20.unk	Michigan Dept of Transportation	2013-0067 AUTH Z1 JOB #118059	208,249
UNIVE-MTTI-FNR-High-Speed Trains	20.unk	University of Illinois at Urbana-Champaign	SUB NO. 2012-06188-01, A0332	10,184
CAMBR-MTTI-Road Practitioners	20.unk	Cambridge Systematics, Inc.	SUBCONTRACT #8738-001	12,523
NATIO-MTTI-Joint Deterioration Stud	20.unk	National Concrete Pavement Technology Center	ISU #474-17-40	17,665
NURail Center	20.unk	Michigan Dept of Transportation	2010-0295 AUTH 8 JOB 116234	68,471
MITRA-MTTI-Bridge Decks	20.unk	Michigan Dept of Transportation	2010-0295 AUTH 7 JOB#117429	134,249
MITRA-Wireless Data Collection	20.unk	Michigan Dept of Transportation	2013-0067 AUTH 2 JOB#121389	125,936
MITRA-MTTI-Improve Climatic Files	20.unk	Michigan Dept of Transportation	2013-0067 AUTH 3, JOB #121388	107,699
WISCO-MTTI-Class C Fly Ash	20.unk	Wisconsin Dept of Transportation	PROJECT ID 0092-12-04	24,752
ALION-Weapons Systems Contaminant	20.unk	Alion Science and Technology Corporation	PRIME SP0700-99-D-0301	3,911
ALION-Weapon Systems Acoustic Eval	20.unk	Alion Science and Technology Corporation	ALION SUB 1126301 TASK ORD 003	221,153
WALTO-Blast Reduction (BREAD 2)	20.unk	Waltonen Engineering Inc	WALTONEN SUBCONTRACT #WEI-0004	53,677
WALTO-BREAD 2 Option 1	20.unk	Waltonen Engineering Inc	WALTONEN SUB#WEI-0004 MOD 001	56,442
				<u>1,572,143</u>
University Transportation Centers Program:				
OHIOS-NEXTRANS Year 4	20.701	Ohio State University	60037345 PRIME DTRT07-G-0005	16,425
OHIOS-Truck Activity and Wait Times	20.701	Ohio State University	SUBAWARD NO. 60041614	6,195
UNIVE-MTTI-NURail Education Center	20.701	University of Illinois at Urbana-Champaign	2012-02061-05-00 CODE:A0694	183,481
				<u>206,101</u>
Transportation Planning, Research and Education:				
USTRA-MTTI-Auto Scour Detect Arrays	20.931	Direct	RITARS-12-H-MTU	311,064
USTRA-MTTI-Sust Geotech Asset Mgmt	20.931	Direct	RITARS-14-H-MTU	221,747
				<u>532,811</u>
Total U.S. Department of Transportation				<u>2,311,055</u>
National Aeronautics and Space Administration				
No CFDA Number:				
USNAS-FNR-CSERI-Pic of the Day	43.unk	Direct	NNX09AD32G	71,832
USNAS-FNR-EPSSI-Vald OMI L2 Sulfur	43.unk	Direct	NNX09AJ40G	7,517
USNAS-APSRC-Heat Trans Evap Films	43.unk	Direct	NNX09AM31G	(815)
USNAS-Vulnerability NA Boreal Peat	43.unk	Direct	NNX09AM15G	72,493
USNAS-Multi-Scale Water Quality Grt	43.unk	Direct	NNX09AU88G	85,965
USNAS-Impact Implication Fire Tund	43.unk	Direct	NNX10AF41G	164,299
USNAS-IMP-Elongated Pore Form	43.unk	Direct	NNX10AV37G	127,814
EXOTE-FNR-Trajectory Optimization	43.unk	Exo Terra Resource	MTU#1309064, PO#1004	7,627
NATIO-Linking NASA Sat Data	43.unk	National Institute of Aerospace	X09-7059-MTU	9,237
UNIVE-EPSSI-FNR-NPP Ozone Mapping	43.unk	University of Maryland College Park	Z664401 PRIME NNX11AK95G	21,672

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Research and Development Cluster (Continued)				
National Aeronautics and Space Administration (Continued)				
No CFDA Number (Concluded):				
UNIVE-FNR-MSGC-Graphene Biosensors	43.unk	University of Michigan	CHECK #2751150	\$ (34)
UNIVE-MSGC-FNR-Orthostatic Challenge	43.unk	University of Michigan	CHECK #2751150	(27)
UNIVE-FNR-MSGC-RS Gases/Smoke Plume	43.unk	University of Michigan	CHECK #2993583	2,685
UNIVE-FNR-MSGC-Co-Crystals/Rocket	43.unk	University of Michigan	CHECK #2993583	1,870
				<u>572,135</u>
Science:				
USNAS-Remote Sensing Models	43.001	Direct	NNX11AC72G	461,392
USNAS-FNR-EPPSI- A-Train Volcano	43.001	Direct	NNX11AF42G	86,268
USNAS-Biomass Burning for Carbon	43.001	Direct	NNX11AL34G	(266)
USNAS-FNR-EPSSI-FFC-Fuel Consumption	43.001	Direct	NNX12AK31G	117,539
USNAS-Carbon Monitoring System	43.001	Direct	NNX12AM91G	225,783
USNAS-FNR-ESC-FFC-Enhancing Tools	43.001	Direct	NNX12AL53G	18,898
USNAS-Carbon Monitoring Products	43.001	Direct	NNX12AP94G	193,193
USNAS-Linking Remote Sensing	43.001	Direct	NNX12AQ89G	77,739
USNAS-Agricultural & Wildland Fire	43.001	Direct	NNX12AQ90G	39,271
USNAS-Anthropogenic Fires	43.001	Direct	NNX13AC66G	127,047
USNAS - EPSSI - FNR - Climatology	43.001	Direct	NNX13AF50G	54,573
USNAS-EPSSI-FNR-Solar Activity	43.001	Direct	NNX113AF90G	104,547
USNAS-Linking Remote Sensing Data	43.001	Direct	NNX14AD63G	18,802
USNAS-Wetland Hydroperiod	43.001	Direct	NNX13AN59G	23,000
USNAS-GLRC-FNR-Spectral Character	43.001	Direct	NNX14AB80G	19,006
NATIO-MTRI-Remote Sensing Community	43.001	Direct	NNX14AC90G	46,410
BOWDO-Carbon Export Maine Coast	43.001	Bowdoin College	AGREEMENT NO 2011 001	106,420
CARNE-CO2 Monitoring Network	43.001	Carnegie Institute of Washington	SUBCONTRACT NO 9-10330-01	72,437
MASSA-GLRC-FNR-Ecological Viability	43.001	Massachusetts Institute of Technology	5710003376	32,844
UNIVE-FNR-EPSSI-Volcanic Sulfate	43.001	University of Nebraska - Lincoln	25-0514-0108-002 #NNX10AG60G	20,633
UNIVE-GLRC-Connecting Phytoplankton	43.001	University of Wisconsin-Madison	412K716 PRIME NNX11AD59G	67,992
UNIVE-MultSensor Record of Fire	43.001	University of Maryland	Z681801	88,385
				<u>2,001,913</u>
Aeronautics:				
USNAS-FNR-MuSTI Noise Reduction App	43.002	Direct	NNX11AI72A	59,462
Cross Agency Support:				
USNAS-FNR-MuSTI-Mdl Polymer Nanocom	43.009	Direct	NNX09AM50A	38,997
USNAS-MUSTI-FNR-Cryogenic	43.009	Direct	NNX14AB05G	53,535
				<u>92,532</u>
Total National Aeronautics and Space Administration				<u>2,726,042</u>
National Science Foundation				
No CFDA Number:				
JFDRA-Digital Technology Education	47.unk	J F Drake State Technical College	DPO-1201002 DUE-1205169	36,871
NANOI-MuSTI-Boron Nitride Nanotubes	47.unk	Nano Innovations, LLC	MTU #1302009	61,253
				<u>98,124</u>
Engineering Grants:				
NSF-MuSTI-CAREER: Gas-Liq Interface	47.041	Direct	CBET-0748049	36,209
NSF-CWS1-Mdl-Analyz Water-Grt Lks	47.041	Direct	CMMI-0725636	43,968
NSF-MuSTI-Self Healing Microfibers	47.041	Direct	CMMI-0900582	20,334
NSF-IEM Promote Anions H Storage	47.041	Direct	CBET-0931587	41,568
NSF-MuSTI-Energy Harvesting Nanowires	47.041	Direct	CMMI-0926819	20,374
NSF-APSRC-Fluid Structure Wind Turb	47.041	Direct	CBET-0933058	3,567
NSF-CISSIC-Comp Coop Wideband Spec	47.041	Direct	ECCS-0925881	39,553
NSF-CISSIC Impl Dielectric Metamat	47.041	Direct	ECCS-0968850	9,534
NSF-CWS1-Mod Eval Hydro Micro DNAP	47.041	Direct	CBET-1034700	101,049
NSF-APSRC-Flow Prediction Fluctuation	47.041	Direct	CBET-1033591	81,753
NSF-APSRC-CAREER Fluid Structure	47.041	Direct	CBET-0952218	100,069
NSF-Meeting NAE Grand Challenge	47.041	Direct	EEC-1024628	54,599
NSF-EAGER-APSRC-Wireless Networks	47.041	Direct	CMMI-1049294	15,140
NSF-Collaborative ISES Study	47.041	Direct	EEC-1025220	24,648
NSF-FNR-BRIGE 1D PdFe Core-pt Shell	47.041	Direct	CBET-1032547	(4,300)

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Research and Development Cluster (Continued)				
National Science Foundation (Continued)				
Engineering Grants (Concluded):				
NSF-CWS1-IDR:SustianableWater	47.041	Direct	CBET-1014818	\$ 45,171
NSF-SFI-RET-W2W Transp Shonnard	47.041	Direct	EEC-1009617	163,330
NSF-APS-FNR- REU Site Fuel Technology	47.041	Direct	EEC-1062886	97,766
NSF-SFI Mainshock/Aftershock Seq	47.041	Direct	CMMI-1100423	115,387
NSF-CAREER-ABO Blood DEMos	47.041	Direct	CBET-1041338	(10,326)
NSF-MuSTI-Fractal Nanoparticles	47.041	Direct	CMMI-1130651	42,363
NSF-BRC-FNR-BRIGE-Membrane Develop	47.041	Direct	CBET-1125585	25,705
NSF-CISSIC-Near Ground Wireless	47.041	Direct	ECCS-1101843	117,490
NSF-Making Optics from Scratch	47.041	Direct	ECCS-1202443	43,443
Collaborative Research: Integrated	47.041	Direct	CMMI-1200061	51,896
NSF-IMP-Metal Matrix Composites	47.041	Direct	CMMI-1200038	64,760
NSF-PERC-Physical Power Systems	47.041	Direct	ECCS-1128512	71,063
NSF-IMP-SOLAR ENERGY CONVERSION	47.041	Direct	CBET-1235750	53,896
NSF-SFI-Dust Mitigation	47.041	Direct	CMMI-1234126	70,296
NSF-SFI-Gas Diffusion Electrode	47.041	Direct	CBET-1235982	138,164
NSF-SFI-Electrocatalytic Oxidation	47.041	Direct	CBET-1159448	90,378
NSF-BRC Preferential Hydration	47.041	Direct	CBET-1159425	96,084
NSF-Molecular Scale Spin-Switch	47.041	Direct	ECCS-1249504	38,313
NSF-MUSTI-Intercalation in Cathodes	47.041	Direct	CMMI-1200383	76,335
NSF-MuSTI-Boron Nanotubes	47.041	Direct	IIP-1265116	488
NSF-APS-Biocoal for Power	47.041	Direct	IIP-1314114	(187)
NSF-SFI-Aerodynamic Vibration	47.041	Direct	CMMI-1300970	47,105
NSF-MuSTI-On-Chip Gas Generation	47.041	Direct	CBET-1264549	46,105
NSF-BRC-I-Corps: ABO-Rh Bld Identif	47.041	Direct	IIP-1340126	30,069
NSF-EPSSI-Damage Assessment	47.041	Direct	CMMI-1300720	51,027
NSF-MTTI-I-Corps: Infrastructure Sys	47.041	Direct	IIP-1342892	50,254
NSF-MTTI-SusChEM/Collaborative Rese	47.041	Direct	CMMI-1300286	28,899
NSF-APSRC-Combustion Engines	47.041	Direct	CBET-1258720	163,951
NSF-MuSTI-High Voltage Temperature	47.041	Direct	IIP-1362040	17,392
NSF-MuSTI-CAREER-Mobility Amputees	47.041	Direct	CBET-1350154	12,111
NSF-BRC-PFI: AIR-TT Blood Typing	47.041	Direct	IIP-1414331	35,897
UNIVE-MuSTI-Liquid Nanotube Compos	47.041	University of Oregon	209041A	7,488
				<u>2,470,178</u>
Mathematical and Physical Sciences:				
NSF-Bound & Continuum Properties	47.049	Direct	PHY-0968205	60,340
NSF-EPSSI-HAWC Gamma-Ray	47.049	Direct	PHY-1002445	81,515
NSF-BRC-Purification Synth Peptide	47.049	Direct	CHE-1111192	22,673
NSF-MuSTI-Cellulose Nanocrystals	47.049	Direct	DMR-1100806	48,956
NSF-SFI-Hydrocarbon Transportation	47.049	Direct	CHE-1230803	508,986
NSF-Numerical Methods Transmission	47.049	Direct	DMS-1321391	7,445
NSF-MuSTI Functional Boron Nitride	47.049	Direct	DMR-1261910	110,149
NSF-EPSSI-Cosmic Ray Acceleration	47.049	Direct	PHY-1307289 AMEND NO 1	95,445
NSF-Hyperbolic Conservation Laws	47.049	Direct	DMS-1316662	44,375
NSF-Workshop on Algebraic Design	47.049	Direct	DMS-1439448	1,267
				<u>981,151</u>
Geosciences:				
NSF-EPSSI-Col Rsh Hygroscopic Aeros	47.050	Direct	ATM-0931505	1,568
NSF-EPSSI-Seismicity Infra High Res	47.050	Direct	EAR-0948526	19,562
NSF-EPSSI-IceNucleiinContactMode	47.050	Direct	AGS-1028998	121,572
NSF-EPSSI-Cloud Turbulence	47.050	Direct	AGS-1026123	83,664
NSF-EPSSI-MRI Dev Multiphase Turb	47.050	Direct	AGS-1039742	512,135
NATIO-EPSSI-Paleomagnetic Investig.	47.050	Direct	EAR-1045406	46,915
NSF-RSI-CAREER Volcano-Seismic	47.050	Direct	EAR-1053794	130,548
NSF-CAREER Flood Risk Projections	47.050	Direct	EAR-1053655	69,679
NSF-Geomagnetic Mafic Dikes India	47.050	Direct	EAR-1112952	61,100
NSF-EPPSI-FREE Tropospheric Aerosol	47.050	Direct	AGS-1110059	245,351
NSF-EPSSI-Physical/Radar Meteor	47.050	Direct	AGS-1119164	99,426
NSF-EPSSI-CAREER-Magnet Fingerprint	47.050	Direct	EAR-1149434	82,621
NSF-EPSSI-VOLCANIC SHOCKWAVES	47.050	Direct	EAR-1250153	11,983
NSF-Mid-Continent Rift System	47.050	Direct	EAR-1148321	3,325
NSF-CWS2-South Florida Water	47.050	Direct	EAR-1204474	96,061
NSF-EPSSI-Rock Magnetometer	47.050	Direct	EAR-1160854	356,927
NSF-CWS2-Impacts of Global Transpor	47.050	Direct	ICER-1313755	286,940
NATIO-GLRC-Continuation of MPOWIR	47.050	Direct	OCE-1356212	11,601
NEVAD-EPSSI-MRI Photoacoustic	47.050	Nevada System of Higher Education	663.1085.01 PRIME AGS-1040046	13,939
UNIVE-GLRC-Detect Microcystis Bloom	47.050	University of New Hampshire	SUB NO. 13-061, #OCE-1313783	13,372
UNIVE-CWS-Experimental Frameworks	47.050	University of New Hampshire	SUB 14-066, PRIME ICER-1313804	12,132
				<u>2,280,421</u>

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Research and Development Cluster (Continued)				
National Science Foundation (Concluded)				
Computer and Information Science and Engineering:				
NSF-Resp Conduct Rsch Sci & Eng Ed	47.070	Direct	IIS-0832922	\$ 2,439
NATIO-NSF-CAREER-Model-Nxt-Gen-Sys	47.070	Direct	CCF-0643664	39,975
NSF-GV-Small-Large Data Analysis	47.070	Direct	IIS-1017935	1,297
NSF-Framework for Algorithmic	47.070	Direct	CCF-1116546	50,108
NSF-CCSR-Single Assignment Arch/Com	47.070	Direct	CFF-1116551	2,355
NSF-CCSR-Virtual Environment System	47.070	Direct	CNS-1229297	43,394
NSF-Graph-Based Visual Analytics	47.070	Direct	IIS-1319363	84,655
NSF-CCSR-Graph Sparsification	47.070	Direct	CCF-1318694	89,362
NSF-CCSR-CAREER-Integrated Research	47.070	Direct	CCF-1349984	15,888
NSF-CAREER-Heterogeneous Manycore	47.070	Direct	CCF-1350206	10,380
				<u>339,853</u>
Biological Sciences:				
NSF-ESC-FFC-Response to Nitrate Dep	47.074	Direct	DEB-0814864	6,370
NSF-ESC-FFC-Predation Eco System	47.074	Direct	DEB-1019928	33,153
NSF-ESC-FFC-PEATLAND ECOSYSTEMS	47.074	Direct	DEB-1146149	219,810
NSF-BRC-EAGER RNAi Gene Discovery	47.074	Direct	IOS-1219316	139,709
NSF-BRC-EAGER-DNA Synthesis	47.074	Direct	DBI-1225720	51,315
NSF-ESC-FFC-FNR-Nitrate Deposition	47.074	Direct	DEB-1251529	25,971
NSF-BRC-Targeting microRNAs	47.074	Direct	IOS-1340001	1,617
PENNS-FFC-BRC-Stress in Wood	47.074		4374-MTU-NSF-5974 IOS 1025974	64,790
VIRGI-BRC-Diphosho Triphosho Inos	47.074	Virginia Polytechnic Institute & State University	478501-19959 #MCB-1051646	7,280
				<u>550,015</u>
Social, Behavioral, and Economic Sciences:				
NSF-IMP-Ceramic Rehydroxylation	47.075	Direct	BCS-1219540	27,335
NSF-CAREER-Numeracy & Risk Literacy	47.075	Direct	SES-1253263	73,691
NSF-Self-Regulated Forest Sustain	47.075	Direct	SES-1251932	35,521
				<u>136,547</u>
Education and Human Resources:				
NSF-EPSSI-Cyber Volcano Hazards Mod	47.076	Direct	DRL-0940883	54,884
NSF-Digital Logic Design Collab.	47.076	Direct	DUE-1003389	1,914
NSF-Learning Through EFELTS	47.076	Direct	DUE-1023022	51,996
NSF-CAREER Math Moments Instru	47.076	Direct	DRL-1052958	59,645
NSF-ILI-Ethical Reasoning & Climate	47.076	Direct	DUE-1122390	12,088
NSF-Teaching IT Security	47.076	Direct	DUE-1140308	67,488
NSF-Modern Cryptography	47.076	Direct	DUE-1140512	84,822
NSF-Theory of Productive Math Use	47.076	Direct	DRL-1220357	43,395
NSF-Accessible Access Control	47.076	Direct	DUE-1245310	69,910
UNIVE-Revisiting the Future	47.076	University of Central Florida	64016228 PO#191200	18,797
				<u>464,939</u>
Polar Programs:				
NSF-RSI-Air Snowpack Exch	47.078	Direct	ARC-0713992	5,294
NSF-Measuring Nitrogen Oxide GEO	47.078	Direct	ARC-1107398	93,150
NSF - Clean Snowmobile Challenge	47.078	Direct	ARC-1062619	4,000
				<u>102,444</u>
Office of International and Integrative Activities:				
NSF-RSI-Remte Sen Pac Lat Amer	47.079	Direct	OISE-0530109	62,422
NSF-APS China Workshop and Planning	47.079	Direct	OISE-1157647	32,186
NSF-SFI-Impact of Climate Change	47.079	Direct	OISE-1160097	13,056
NSF-SFI-Bioenergy Development	47.079	Direct	OISE-1243444	716,362
NSF-Pan-American Advanced Study	47.079	Direct	OISE-1242257	79,931
				<u>903,957</u>
Office of Cyberinfrastructure:				
NSF-CWS2-Environmental CyberCitizen	47.080	Direct	OCI-1135523	60,327
ARRA- Trans-NSF Recovery Act Research Support:				
NSF-FFC-ESC-ARRA LTREB Wolf-Moose	47.082	Direct	DEB-0918247	15,369
NSF-CNLM-ARRA Sustain Fuel Lactose	47.082	Direct	CBET-0933017	113,042
				<u>128,411</u>
Total National Science Foundation				<u>8,516,367</u>

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Research and Development Cluster (Continued)				
U.S. Environmental Protection Agency				
No CFDA Number:				
HOUGH-ESC-Hills Creek	66.unk	Houghton-Keweenaw Conservation District	AWARD #1107016	\$ 13,830
LESKT-IMP-Tailings to Shingles Ph 2	66.unk	Lesktech Limited	MTU AGREEMENT #071032	(136)
				<u>13,694</u>
Regional Wetland Program Development Grants:				
MICHI-Approach for Vernal Pools	66.461	Michigan State University	MSU #RC069697-MTU	<u>19,181</u>
Great Lakes Program:				
USENV-Wetland Map Protocol	66.469	Direct	GL-00E00559-0	337,512
USENV-CWS1-Predicting Eco Changes	66.469	Direct	GL-00E00560-0	5,847
USENV-Algal Bloom Mapping Great Lks	66.469	Direct	GL-00E00855-0	61,445
USENV-GLRC-Eurasian Watermilfoil	66.469	Direct	GL-00E01291-0	50,914
				<u>455,718</u>
Science To Achieve Results (STAR) Research Program:				
USENV-RSI-Impacts Land Use Land Cov	66.509	Direct	RD-83428601-0	2,330
USENV-Extreme Event Impacts	66.509	Direct	RD-83518901-0	113,951
				<u>116,281</u>
Consolidated Research/Training/Fellowships:				
WATER-Removal of VOCs from Water	66.511	Water Research Foundation	PROJECT NUMBER 04439	<u>32,311</u>
National Student Design Competition for Sustainability:				
USENV-Useful Aluminum Waste	66.516	Direct	SU-83532401-0	3,023
USENV - Healthier Cooking Env	66.516	Direct	SU-83531501-0	3,128
				<u>6,151</u>
Total U.S. Environmental Protection Agency				<u>643,336</u>
U.S. Department of Energy				
No CFDA Number:				
ARGON-TEM Battery Materials	81.unk	Argonne National Laboratory	SUBCONTRACT NO. 1F-30581	1,796
ARGON-MIMC-Networked Microgrids	81.unk	Argonne National Laboratory	SUBCONTRACT NO. 3F-32461	218,022
GASTE-SFI-Hydrolysis Integrated	81.unk	Gas Technology Institute	PRIME #DE-EE0005992	61,893
LANZA-SFI-Life Cycle Assess	81.unk	LanzaTech Inc	DOE DE-FOA-0000467	116,267
SANDI-PERC-FNR-Microgrid Model	81.unk	Sandia National Laboratories	PO #1103234	142,025
SANDI-MIMC-FNR-Agent Based	81.unk	Sandia National Laboratories	PURCHASE ORDER 1328983	83,360
SANDI-AIM-Advanced Control Micro	81.unk	Sandia National Laboratories	PO#1416260	28,286
UCHIC-Advanced Vehicle Characteriz	81.unk	UChicago Argonne LLC	2F-32041	29,208
UCHIC-IMP-Computational Modeling	81.unk	UChicago Argonne LLC	3F-31541	9,802
UCHIC-IMP-High Energy Lithium	81.unk	UChicago Argonne LLC	4F-30001	30,008
				<u>720,667</u>
Office of Science Financial Assistance Program:				
USENE-ESC-Forest Atmosphere Carbon	81.049	Direct	DE-FG02-95ER62125-AMD A019	120,640
USENE-EPSSI-Yr15-High Energy	81.049	Direct	DE-FG02-99ER41107-AMD A008	197,128
USENE-ESC Midwest Center Climate	81.049	Direct	DE-FC02-06ER64158 A005	1,642
USENE-ESC-FFC-Midwest Center NICCR	81.049	Direct	DE-FC02-06ER64158 AMEND #A005	16,093
USENE-IEM-Behavior Ferroelect Matls	81.049	Direct	DE-SC0002196	1,357
USENE-EPSSI-Contact Freezing	81.049	Direct	DE-SC0006949	109,031
USENE-EPSSI-Tropospheric Aerosols	81.049	Direct	DE-SC0006941	14,364
USENE-ESC-FFC-Wood Carbon Pools	81.049	Direct	DE-SC0006986	32,583
USENE-BRC-Genes Affect Wood Biomass	81.049	Direct	DE-SC0008462	233,940
USENE-EPSSI-Atmospheric Transport	81.049	Direct	DE-SC0010019	27,707
USENE-EPSSI-Particle Astrophysics	81.049	Direct	DE-SC0011689	67,742
COLOR-EPSSI-North Hem P Auger Co	81.049	Colorado State University	G-0113-1 P2	6,873
MARSH-MuSTI-Nano Systems-Phase 2	81.049	Marshall University Research Corporation	2010-001/210079 PO #P1201599	20,373
UNIVE-ESC-FFC-Carbon Water Cycling	81.049	University of Colorado-Boulder	1548803	(2,493)
				<u>846,980</u>
Renewable Energy Research and Development:				
THREE-APSRC-Low Cost Membrane	81.087	3M Company	SUBAWARD #USMM7X38T	193,396
Advanced Gasoline Turbocharged Dire	81.087	Ford Motor Corp - Ford Rsch & Adv Eng	FORD PO# A 10 PO11 159794	341,847
				<u>535,243</u>

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MICHIGAN TECHNOLOGICAL UNIVERSITY

Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Research and Development Cluster (Continued)				
U.S. Department of Energy (Concluded)				
Advanced Research Projects Agency - Energy:				
LANZA-SFI-LCA Support Gas Conversion	81.135	Lanza Tech	MICHIGAN TECH AGMT #1306017	\$ 5,653
RELIN-MuSTI-Pressure Tanks	81.135	REL Inc	1208008 PRIME DE-AR0000253	14,415
RELIN-MuSTI-Sr Design Pressure Tank	81.135	REL Inc	STUDENT PROJ #1208036 PRIME DE	3,553
				<u>23,621</u>
Total U.S. Department of Energy				<u>2,126,511</u>
U.S. Department of Education				
Fund for the Improvement of Postsecondary Education:				
NORTH-BRC-FFC-Transatl Grad Degree	84.116	North Carolina State University	2008-1905-01	8,968
USEDU-EPSSI-Yr 1-INVOGE Program	84.116J	Direct	P116J090031-ACTION NO. 01	72,694
Total U.S. Department of Education				<u>81,662</u>
National Archives and Records Administration				
National Historical Publications and Records Grants:				
NATIO-Extract Buried Treasure	89.003	Direct	NAR11-RP-50064-11	<u>77,727</u>
U.S. Department of Health and Human Services				
No CFDA Number:				
CENTE-NIOSH Mining Bit Instrument	93.unk	Direct	NIOSH # 254-2012-M-51076	52
CLEVE-Evaluate SARA EEG Electrodes	93.unk	Cleveland Medical Devices Inc	PRIME #2R44NS053116-02A1	13,608
RADIO-CSERI-Shear Wave Speed	93.unk	Radiological Society of North America	HHSN268201300071C(K-3)	4,800
				<u>18,460</u>
Environmental Health:				
UNIVE-GLRC-Microcystis Blooms	93.113	University of New Hampshire	SUBAWARD NO. 13-060	<u>12,860</u>
Human Genome Research:				
NIH-BRC-Family Based Association	93.172	Direct	1 R03 HG006155-01A1	<u>76,744</u>
National Center on Sleep Disorders Research:				
UNIVE-Sleep Disordered Breathing	93.233	University of Michigan	SUBAWARD #3002300214	<u>35,502</u>
Discovery and Applied Research for Technological Innovations to Improve Human Health:				
NIH-ILI-Cardiac Annunciator	93.286	Direct	1 R03 EB014844-01	81,555
NIH-BRC-Novel Nano-Mechanical	93.286	Direct	1 R03 EB014504-01A1	76,391
				<u>157,946</u>
Cancer Detection and Diagnosis Research:				
UNIVE-BRC-Ablation	93.394	University of Wisconsin-Madison	SUB #494K686 PRIME R01CA112192	<u>14,976</u>
Cancer Cause and Prevention Research:				
NIH-Targeting Integrin Tumor Cells	93.396	Direct	1 R15 CA152828-01	<u>48,127</u>
Cardiovascular Diseases Research:				
NIH-BRC-Lymphatic Collecting	93.837	Direct	1 R15 HL113954-01	125,198
NIH-BRC-Small Diameter Blood Vessel	93.837	Direct	1R15HL115521-01A1	76,545
				<u>201,743</u>
Biomedical Research and Research Training:				
NIH-BRC-Enhance Barcode Readability	93.859	Direct	1 R15 GM088795-01	19,903
NIH-BRC-Centrosome Assembly	93.859	Direct	1 R15 GM101633-01	3,995
NIH-BRC-Biomimetic Tissue Adhesive	93.859	Direct	1 R15 GM104846-01	166,489
NIH-BRC-Oligodeoxynucleotide	93.859	Direct	1R15GM109288-01	11,329
				<u>201,716</u>
Child Health and Human Development Extramural Research:				
NIH-Net Migration Estimates	93.865	Direct	7R03HD069737-02	19,787
MAYOM-MuSTI-Intramuscular Pressure	93.865	Mayo Clinic Rochester	2R01HD031476-11A1 PO#63350409	812
				<u>20,599</u>
Total U.S. Department of Health and Human Services				<u>788,673</u>
Total Research and Development Cluster				<u>30,587,592</u>

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MICHIGAN TECHNOLOGICAL UNIVERSITY

Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Other Programs				
U.S. Department of Agriculture				
No CFDA Number:				
USAGR-FFC-Below Grnd Ecosystem	10.unk	Direct	08-JV-11242306-064	\$ (345)
USAGR-ESC-FFC-Climate Chnge Science	10.unk	Direct	09-PA-11242306-142	315,709
USAGR-ESC-FFC-Ed/Outrch Climate Chg	10.unk	Direct	11-CR-11242306-124	20,389
USAGR-ESC-FFC-Belowground Ecosystem	10.unk	Direct	13-JV-11242306-039	32,600
USFOR-FFC-ESC-Silviculture 7 2013	10.unk	Direct	LETTER DATE 2/04/2013	43,660
				<u>412,013</u>
Child and Adult Care Food Program	10.558	Michigan Dept of Education	-n/a-	<u>9,645</u>
Forestry Research:				
USAGR-ESC-FFC-Climate Change Silvi	10.652	Direct	11-CA-11330124-051	<u>10,943</u>
Cooperative Forestry Assistance:				
USAGR-SFI-Develop Forest Stewards	10.664	Direct	11-DG-11420004-234	<u>21,397</u>
Total U.S. Department of Agriculture				<u>453,998</u>
U.S. Department of Commerce				
No CFDA Number:				
MICHI-Mapping Development Resources	11.unk	Michigan State University	AWARD LETTER DATED 5/31/13	<u>2,500</u>
U.S. Department of Defense				
No CFDA Number:				
USARM-APS-Heroes Alliance Boot Camp	12.unk	Direct	P.O. #V100027AG	15,737
UNIVE-Army ROTC SWE Sponsorship	12.unk	Universal McCann	PURCHASE ORDER 376013	5,000
TECHN-PIOI-UNITE-Summer Youth	12.unk	Technology Student Association	AWARD LETTER DATED 2/24/13	<u>28,500</u>
Total U.S. Department of Defense				<u>49,237</u>
U.S. Department of Interior				
No CFDA Number:				
USPAR-ESC-FFC-Iste Roy Inst Support	15.unk	Direct	TASK AGRMT NO P09AC00199	37,749
USBUR-IPA Assignment J Payne	15.unk	Direct	IPA ASSIGNMENT DATED 3/7/13	288,138
OZAUKE-ESC-FFC-Landbird Migration	15.unk	Ozaukee Washington Land Trust, Inc.	AGREEMENT DATED 11/22/2013	<u>12,695</u>
Total U.S. Department of Interior				<u>338,582</u>
U.S. Department of Labor				
Mine Health and Safety Grants:				
USLAB-FY13 Mine Safety	17.600	Direct	MS-24591-13-55-R-26	90,464
USLAB-FY14 Mine Safety	17.600	Direct	MS-25890-14-55-R-26	<u>8,824</u>
Total U.S. Department of Labor				<u>99,288</u>
U.S. Department of Transportation				
No CFDA Number:				
MITRA-Natl Summer Trans Ins 2013	20.unk	Michigan Dept of Transportation	CONTRACT NO. 2013-0253	60,627
MITRA-PIOI-NST Institute 2014	20.unk	Michigan Dept of Transportation	2014-0557	2,306
LTAP 2013	20.unk	Michigan Dept of Transportation	2010-0470 AUTH Z5 ,Z6, Z7	92,071
MITRA-MTTI-TDG-2014 LTAP	20.unk	Michigan Dept of Transportation	2010-0470 AUTH Z8,Z9,Z10	386,977
MITRA-MTTI-Bridge Design Analysis	20.unk	Michigan Dept of Transportation	CONTRACT NO. 2013-0506	140,065
MITRA-MTTI-Training Elected Official	20.unk	Michigan Dept of Transportation	2010-0470 AUTH Z2 JOB 111377	14,903
MITRA-MTTI-Hwy Safety Manuals	20.unk	Michigan Dept of Transportation	2010-0470 AUTH Z4 JOB 111387	22,156
MITRA-MTTI-MERL 2013	20.unk	Michigan Dept of Transportation	2011-0063 AUTH 3	55,519
				<u>774,624</u>
Highway Research and Development Program:				
SNYDE-IMP-Concrete Pavement Technol	20.200	Snyder & Associates	SUB; PRIME DTFH61-12-H-0010	1,085
USTR-MTTI-MI Tribal Technical Asst	20.200	Direct	DTFH61-09-H-00001	209,880
USTR-MTTI-Eastern Region TTAP Cntr	20.200	Direct	DTFH6114H00006	117,003
				<u>327,968</u>
University Transportation Centers Program:				
UNIVE-21st Century Education	20.701	University of Wisconsin-Madison	AGREEMENT #394K026	<u>49,384</u>
Total U.S. Department of Transportation				<u>1,151,976</u>

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MICHIGAN TECHNOLOGICAL UNIVERSITY

Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Other Programs (Continued)				
National Aeronautics and Space Administration				
No CFDA Number:				
UNIVE-IMP-MSGC-Magnesium	43.unk	University of Michigan	CHECK #2751149	\$ 2,108
UNIVE-MTTI-MSGC-Ewaste Improve	43.unk	University of Michigan	CHECK #2751149	(31)
UNIVE-MSGC-Great Lakes Teacher Inst	43.unk	University of Michigan	CHECK #2751150	4
UNIVE-MSGC-FY13 Administrative	43.unk	University of Michigan	CK# 2751150	632
UNIVE-MSGC-Graphene/Epoxy Composite	43.unk	University of Michigan	CHECK#2993583	4,470
UNIVE-MSGC-Native American Involvmt	43.unk	University of Michigan	CHECK#2993583	3,305
UNIVE-MSGC-Assess Watershed Health	43.unk	University of Michigan	CHECK#2993583	4,982
UNIVE-MSGC-Modulate Neuron Behaviors	43.unk	University of Michigan	CHECK#2993583	2,001
UNIVE-MSGC-Monitor DNA Methylation	43.unk	University of Michigan	CHECK#2993583	1,220
UNIVE-MSGC-Martian Hydro Cycle	43.unk	University of Michigan	CHECK #2993583	1,754
UNIVE-MSGC-Volcanic Hazard Monitoring	43.unk	University of Michigan	CHECK#2993583	3,226
UNIVE-MSGC-Cloud Microphysics/Lab	43.unk	University of Michigan	CHECK#2993583	4,992
UNIVE-MSGC-Metal Matrix Composites	43.unk	University of Michigan	CHECK #2993583	2,500
UNIVE-MSGC-Magnesium Alloy Stents	43.unk	University of Michigan	CHECK#2993583	2,593
UNIVE-MSGC-Corrosion/Bioabsorb Matl	43.unk	University of Michigan	CHECK#2993583	2,262
UNIVE-MSGC-Copper-Vermiculite Fillr	43.unk	University of Michigan	CHECK #2993583	2,369
UNIVE-MSGC-High Ductility	43.unk	University of Michigan	CHECK#2993583	2,407
UNIVE-MSGC-Antimicrobial Polymeric	43.unk	University of Michigan	CHECK#2993583	1,687
UNIVE-MSGC-Oculus-ASR	43.unk	University of Michigan	CHECK#2993583	2,500
UNIVE-FNR-MSGC-Rocketry System	43.unk	University of Michigan	CHECK #2993583	2,985
UNIVE-FNR-MSGC-Celebrate Superior	43.unk	University of Michigan	CHECK #2993583	5,000
UNIVE-MSGC-ILI-FY14-Administrative	43.unk	University of Michigan	CHECK #3144891	333
UNIVE-MSGC-GLRC-Phytoplankton	43.unk	University of Michigan	CHECK#3238610	3,333
UNIVE-MSGC-Native American InvolVP2	43.unk	University of Michigan	CHECK #3238610	773
UNIVE-MSGC-APSRC-High Impact STEM	43.unk	University of Michigan	CHECK# 3238610	1
UNIVE-MSGC-Geotechnical Features	43.unk	University of Michigan	CHECK #3238610	1,610
UNIVE-MSGC-Quantity and Biodegrade	43.unk	University of Michigan	CHECK #3238610	1,409
				<u>60,425</u>
Science:				
USNAS-FNR-Mixed Phased Cloud	43.001	Direct	NNX12AN91H	12,141
USNAS-FNR-S. China-fellowship	43.001	Direct	NNX12AN97H	31,518
USNAS-FNR-Wright Fellowship	43.001	Direct	NNX13AN68H	27,307
USNAS-FNR-LSchaefer-fellowship	43.001	Direct	NNX13AO50H	27,922
				<u>98,888</u>
Education:				
USNAS-FNR-MuSTI-KTerhune fellowship	43.008	Direct	NNX13AM73H	56,935
				<u>216,248</u>
Total National Aeronautics and Space Administration				
National Endowment for the Humanities				
Promotion of the Arts Partnership Agreements:				
Aquila Theatre Company, Repertoire:	45.025	Arts Midwest	FY14-210312	2,430
They All Die in the End: A Theatri	45.025	Michigan Council for Arts & Cultural Affairs	140P0254P5	6,600
				<u>9,030</u>
Total National Endowment for the Humanities				
National Science Foundation				
No CFDA Number:				
NSF - IPA Assignment	47.unk	Direct	ECCS-1212464	211,378
NSF-IPA Assignment P Murthy	47.unk	Direct	DGE-1261336	183,616
UNIVE-MSGC-FNR-ROV's Teaching STEM	47.unk	University of Michigan	CHECK#2993583	10,000
				<u>404,994</u>
Engineering Grants:				
NSF-SFI-Biofuels and Bioenergy	47.041	Direct	CBET-1140152	174,501
Geosciences:				
NSF-Ethics Education 2.0	47.050	Direct	GEO-0933026	16,513
National Science Foundation:				
NSF B. Tymrak Fellowship	47.073	Direct	DGE-1051031	4,500
Biological Sciences:				
NSF-ESC-FFC-Ford Center Improvement	47.074	Direct	DBI-1226627	146,147

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MICHIGAN TECHNOLOGICAL UNIVERSITY

Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2014

Federal Agency / Cluster / Program Title	CFDA Number	Passed Through	Pass-through / Grantor Number	Federal Expenditures
Other Programs (Concluded)				
National Science Foundation				
Education and Human Resources:				
STEVE-Interactions Unlimited	47.076	Stevens Institute of Technology	AGREEMENT DATED 12/21/12	\$ 2,000
STEVE-ENGAGE E3s Engineering Student	47.076	Stevens Institute of Technology	LETTER OF AGRMT DATED 3/22/13	495
UNIVE-Enrich AGEP Alliance	47.076	University of Michigan	3001959810	1,773
NSF-EPSSI MITEP: Improving Earth	47.076	Direct	DUE-0831948	591,780
NSF-FNR-MTU SSEED Support4EngDegree	47.076	Direct	DUE-0965996	106,671
NSF-PERC-K Bunker - Fellowship	47.076	Direct	DGE-1051031	4,500
NSF-E. Petushek Fellowship	47.076	Direct	DGE-1051031 AMEND NO 002	45,953
NSF-M. Hopkins Fellowship	47.076	Direct	DGE-1051031, AMEND NO 003	41,911
NSF-J Fuller Fellowship	47.076	Direct	DGE-1051031 AMEND NO 004	45,833
NSF-D Cerminaro Fellowship	47.076	Direct	DGE-1051031 AMEND. NO. 005	44,558
NSF-Professoriate Progression	47.076	Direct	HRD-1305678	22,020
NSF-ADV ACCT-B Winter Fellowship	47.076	Direct	ADVANCE ACCOUNT	8,000
				<u>915,494</u>
Office of Cyberinfrastructure:				
NSF-CWS2-Environmental CyberCitizen	47.080	Direct	OCI-1135523	<u>16,002</u>
ARRA- Trans-NSF Recovery Act Research Support:				
NSF-ARRA-FNR-CWS1-GK12-Huckins	47.082	Direct	DGE-0841073	571,100
NSF-FNR-ARRA-R Noyce Teacher Scholr	47.082	Direct	DUE-0934763	108,413
				<u>679,513</u>
Total National Science Foundation				<u>2,357,664</u>
Small Business Administration				
Small Business Development Centers:				
SIXCO-Small Business Tech Dev	59.037	Six County Employment Alliance	CONTRACT AGREEMENT	<u>15,487</u>
Other Programs (Concluded)				
U.S. Department of Education				
Fund for the Improvement of Postsecondary Education:				
USEDU-CWS1-Yr 1-SusR Project	84.116N	Direct	P116N080002	<u>23,929</u>
Graduate Assistance in Areas of National Need:				
USEDU-ASISC-FNR-GAANN: Chem Eng Flw	84.200	Direct	P200A090124	<u>85,862</u>
Gaining Early Awareness and Readiness for Undergraduate Programs:				
MILAB-GEAR UP 2013	84.334	Michigan Dept of Labor & Economic Growth	GRT#12-00-07	41,879
MILAB-GEAR UP 2014	84.334	Michigan Dept of Labor & Economic Growth	GRANT NUMBER: 13-00-07	13,011
				<u>54,890</u>
Improving Teacher Quality State Grants:				
MIEDU-EPDIS Biological Sciences	84.367B	Michigan Department of Education	130290-018	146,449
MIEDU-EPDIS-Mathematical Practice	84.367B	Michigan Department of Education	140290-016	1,069
				<u>147,518</u>
Total U.S. Department of Education				<u>312,199</u>
Total Other Programs				<u>5,006,209</u>
Total Expenditures of Federal Awards				<u>\$ 72,821,104</u>
				concluded

See notes to schedule of expenditures of federal awards.

MICHIGAN TECHNOLOGICAL UNIVERSITY

Notes to Schedule of Expenditures of Federal Awards

1. BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards (the "Schedule") includes the federal grant activity of Michigan Technological University (the "University") under programs of the federal government for the year ended June 30, 2014. The information in this schedule is presented in accordance with the requirements of the Office of Management and Budget (OMB) Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Because the schedule presents only a selected portion of the operations of the University, it is not intended to and does not present the financial position, changes in net position or cash flows of the University.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Expenditures reported on the Schedule are reported on the accrual basis of accounting, which is described in Note 1 to the University's financial statements. Such expenditures are recognized following the cost principles contained in OMB Circular A-21, *Cost Principles for Educational Institutions*, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Negative amounts shown on the Schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years. Pass-through entity identifying numbers are presented where available.

3. SUBRECIPIENTS

The University administers certain federal awards programs through subrecipients. Those subrecipients are not considered part of the University's reporting entity. Of the federal expenditures presented in the Schedule, the University provided federal awards to subrecipients as follows:

Program Title	CFDA Number	Amount Provided to Subrecipients
Forestry Research	10.652	\$ 751
Forest Health Protection	10.680	10,064
Climate and Atmospheric Research	11.431	15,435
Department of Defense	12.unk	1,241,208
Basic and Applied Scientific Research	12.300	1,785
Air Force Defense Research Sciences Program	12.800	95,402
Migratory Bird Conservation	15.647	11,500
Department of Transportation	20.unk	79,746
University Transportation Centers Program	20.701	1,731
Transportation Planning, Research and Education	20.931	157,167
National Aeronautics and Space Administration	43.unk	24,750
Science	43.001	429,265
Engineering Grants	47.041	173,826
Geosciences	47.050	60,953
Biological Sciences	47.074	7,390
Education and Human Resources	47.076	199,597
Office of International and Integrative Activities	47.079	264,235
ARRA- Trans-Nsf Recovery Act Research Support	47.082	133,846
Small Business Development Centers	59.037	7,104
Great Lakes Program	66.469	86,042
Department of Energy	81.unk	47,887

MICHIGAN TECHNOLOGICAL UNIVERSITY

Notes to Schedule of Expenditures of Federal Awards

Program Title	CFDA Number	Amount Provided to Subrecipients
Office of Science Financial Assistance Program	81.049	\$ 131,905
Fund for the Improvement of Postsecondary Education	84.116	30,896
Discovery and Applied Research for Technological Innovations to Improve Human Health	93.286	9,370
Child Health and Human Development	93.865	14,543
		<hr/>
Total provided to subrecipients		<u>\$ 3,236,398</u>

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INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN
ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

October 15, 2014

To the Board of Control
Michigan Technological University
Houghton, Michigan

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of *Michigan Technological University* (the "University"), as of and for the year ended June 30, 2014, and the related notes to the financial statements, which collectively comprise the University's basic financial statements, and have issued our report thereon dated October 15, 2014.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the University's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Rehman Loham LLC

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE FOR
EACH MAJOR FEDERAL PROGRAM AND ON INTERNAL CONTROL
OVER COMPLIANCE REQUIRED BY OMB CIRCULAR A-133

October 15, 2014

To the Board of Control
Michigan Technological University
Houghton, Michigan

Report on Compliance for Each Major Federal Program

We have audited the compliance of *Michigan Technological University* (the "University") with the types of compliance requirements described in the *OMB Circular A-133 Compliance Supplement* that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2014. The University's major federal programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to its federal programs.

Independent Auditors' Responsibility

Our responsibility is to express an opinion on compliance for each of the University's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the University's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the University's compliance.

Opinion on Each Major Federal Program

In our opinion, the University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2014.

Report on Internal Control Over Compliance

Management of the University is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the University's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Purpose of this Report

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of OMB Circular A-133. Accordingly, this report is not suitable for any other purpose.

The image shows a handwritten signature in black ink that reads "Lehmann Johnson LLC". The signature is written in a cursive, flowing style.

MICHIGAN TECHNOLOGICAL UNIVERSITY

Schedule of Findings and Questioned Costs For the Year Ended June 30, 2014

SECTION I - SUMMARY OF AUDITORS' RESULTS

Financial Statements

Type of auditors' report issued: Unmodified

Internal control over financial reporting:

Material weakness(es) identified? yes X no

Significant deficiency(ies) identified? yes X none reported

Noncompliance material to financial statements noted? yes X no

Federal Awards

Internal control over major programs:

Material weakness(es) identified? yes X no

Significant deficiency(ies) identified? yes X none reported

Type of auditors' report issued on compliance for major programs: Unmodified

Any audit findings disclosed that are required to be reported in accordance with Circular A-133, Section 510(a)? yes X no

Identification of major programs:

CFDA Number

84.007, 84.033, 84.038, 84.268, 84.063
Various

Name of Federal Program or Cluster

Student Financial Assistance Cluster
Research and Development Cluster

Dollar threshold used to distinguish between Type A and Type B programs:

\$ 2,184,633

Auditee qualified as low-risk auditee?

 X yes no

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Schedule of Findings and Questioned Costs For the Year Ended June 30, 2014

SECTION II - FINANCIAL STATEMENT FINDINGS

None reported.

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Schedule of Findings and Questioned Costs For the Year Ended June 30, 2014

SECTION III - FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

None reported.

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Summary Schedule of Prior Audit Findings For the Year Ended June 30, 2014

None reported.

