

**3rd Quarterly Progress Report to the
FEDERAL HIGHWAY ADMINISTRATION
(FHWA)**

**On the Project:
THE IMPACT OF WIDE-BASE TIRES ON PAVEMENT
DAMAGE
DTFH61-11-C-00025**

**For period
October 1st to December 30st 2011**

**From
University of Illinois at Urbana-Champaign
Illinois Center for Transportation**

FEDERAL HIGHWAY ADMINISTRATION QUARTERLY PROGRESS REPORT

FHWA Project
Research Agent
Principal Investigator

DTFH61-11-C-00025 FY: 2011 Quarter:
Illinois Center for Transportation
Imad L. Al-Qadi

October-December

PHASE	RESEARCH TASK	2011												2012												2013												ESTIMATED % COMPLETION		
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D						
1	1.1. Comprehensive literature review and synthesis on past and current research	■	■	■	■																																			100
		20	60	90	100																																			
	1.2. Experimental plan and modeling framework			■	■																																			100
				50	60	80	100																																	
	1.3. Implementation and marketing plan		■	■	■	■	■																																	100
			10	50	70	80	100																																	
	1.4. Phase I report			■	■																																			100
				60	70	80	100																																	
1.5. Conference call with panel	■	■			■	■																																	100	
		0	50				100																																	
1.6. Presentations to relevant conferences and symposiums						■																																	0	
2	2.1. Prepare experimental equipment, test structures, and instrumentation					■	■	■	■																														0	
	2.2. Conduct experiments, including material characterization and accelerated loading					■	■	■	■	■	■	■	■	■																										0
	2.3. Conduct modeling					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	0	
	2.4. Develop of analysis tool												■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	0	
	2.5. Delivery of draft Phase II report and analysis tool																													■	■	■							0	
	2.6. Present to relevant conferences and symposiums										■			■				■							■				■										0	
	2.7. Prepare article and technical papers										■			■				■								■								■		■			0	
											30	34	39	43	48	53	55	57	59	61	63	64	66	68	70	72	74	76	78	80	87	93	100	100	100	100		11		
Estimated Progress (%)	1	3	7	8	10	11	11	11	11																													11		
Planned Progress (%)	1	3	7	10	13	19	24	30	34	39	43	48	53	55	57	59	61	63	64	66	68	70	72	74	76	78	80	87	93	100	100	100	100		34					

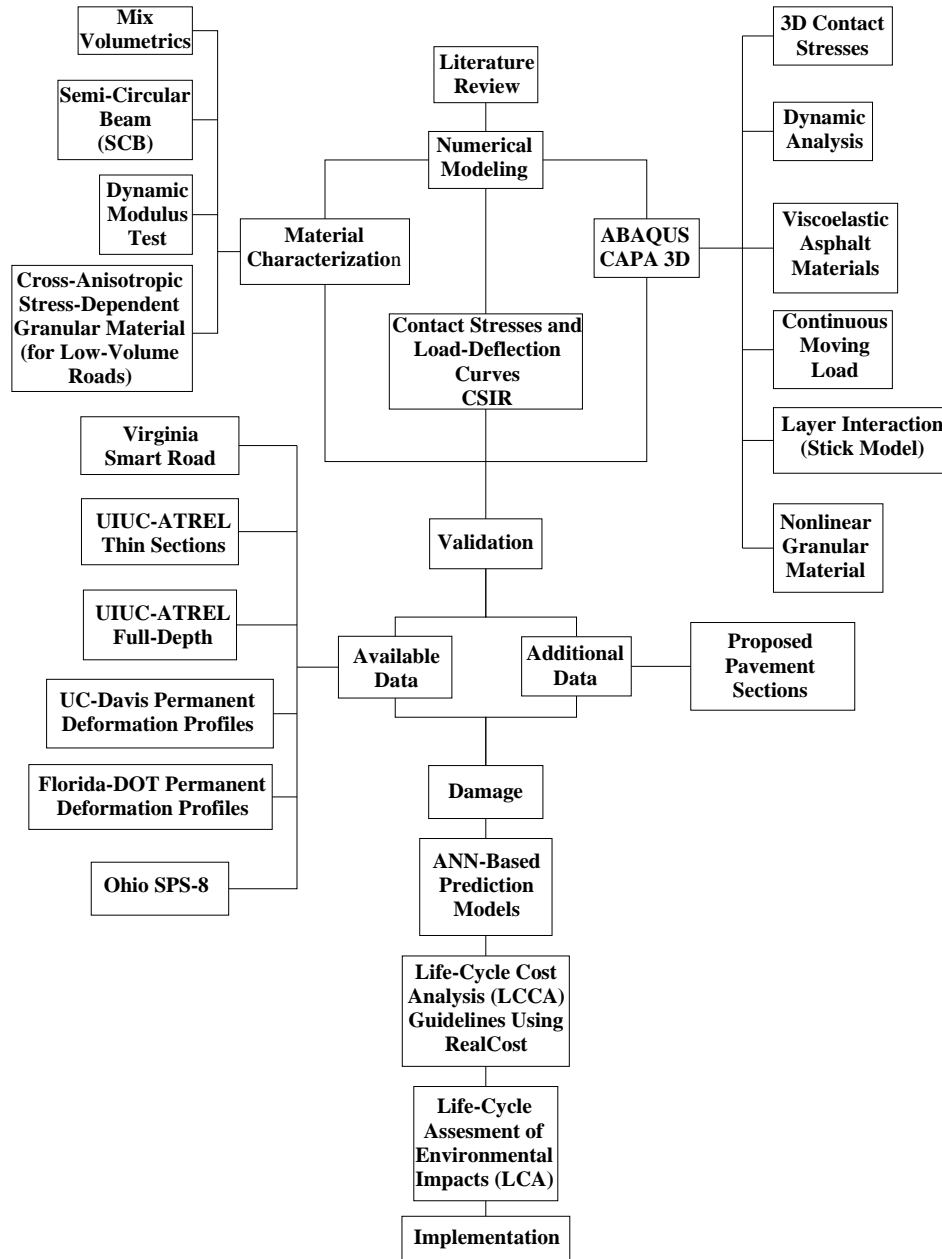
QUARTERLY PROGRESS REPORT

QUARTER 3

The Impact of Wide-Base Tires on Pavement Damage – A National Study

1. Work Performed

Work plan for this project is summarized as in chart 1.



During this quarter, the following tasks have been accomplished:

- The reviewed version of Phase I has been submitted. This version addressed all suggestions,, comments, and recommendations made by the Research Panel based on the face-to-face meeting held in Washington DC on October 26, 2011.
- Tire-cuts of 275/80R22.5 and 445/50R22.5 and their corresponding DXF files have been received from Michelin. This information will define the geometry of the tires to be inputted in the FEM.
- University of Illinois participated in a couple of meetings regarding the reconstruction of SPS Sections at Del 23 in Ohio in order to explore the possibility of installing surface gauges in this project.

2. Work to be accomplished next quarter

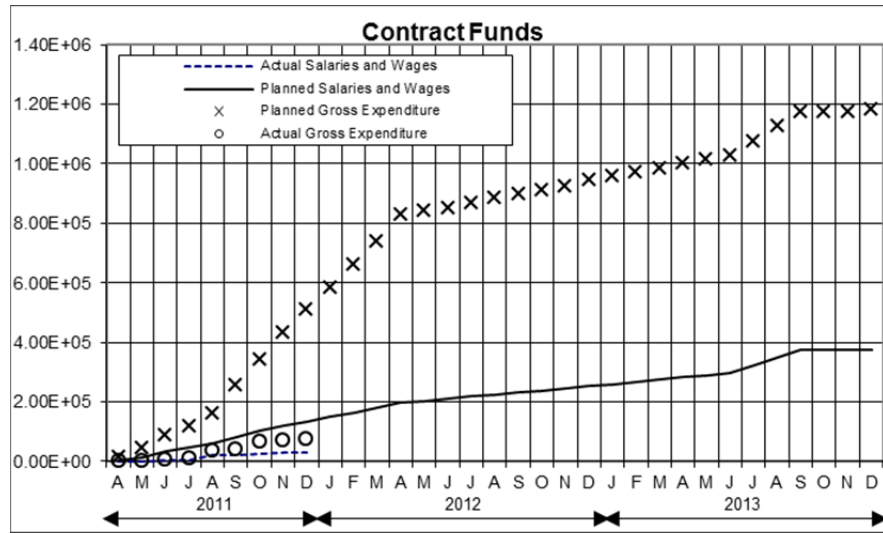
Since there has not been approval of Phase II from the research panel in this period, the activities for next quarter are the same as the ones stated in the previous quarterly report. These activities will be started in accordance with the modified plans presented in the Phase I report after being accepted or modified per the Research Panel. This may include the following:

- Preparation of experimental equipment, test structures, and instrumentation
- Modeling of some available pavement structures and tires

3. Problems encountered

No problems have been encountered in this quarter.

4. Current and cumulative expenditures



funds expended	6.1%	time expended, hrs	922.0
contract amount	<u>\$1,190,456.00</u>	starting date	<u>October 1, 2011</u>
expended this quarter	\$31,986.81	completion date	<u>December 31, 2011</u>
total expenditures to date	\$73,191.95		
balance	<u>\$1,117,264.05</u>		
	salaries and wages estimated this quarter		\$51,965.8
	salaries and wages spent this quarter		\$6,543.8
	accumulated salaries and wages to date		\$29,510.83

5. Planned, actual, and cumulative percent of effort

