

National Road Research Alliance
Executive Committee Meeting Notes (online meeting)
March 22, 2018
12:00 – 1:30pm CST

Online Meeting Link - <https://meet.lync.com/mn365/ben.worel/T2GFJM69>

1. **Welcome/Introductions** (Glenn Engstrom)
2. **MnROAD Legislative Efforts** (Glenn Engstrom)
 - a. Added facilities and resources for training and innovation
3. **Pooled Fund Status** (Ben Worel)
 - a. Membership (6 states and ~45 associate members)
 - b. Budget (Details attached)
 - i. MnDOT has determined that ~373K are still available for NRRRA efforts
 - ii. More details at the May workshop EC meeting
 1. Note Rigid Team request ~150K for RCC pavements in Missouri
 - c. Associate Engagement Efforts
 - i. MnDOT is developing a Liaison List of MnDOT staff to be assigned to each associate member to ensure they have a voice and active member to work with. The list will be shared in May
 - d. Long and Short Term Contract are all underway
 - i. Short Term Priorities / status
 - Flex - Tack Coats / Flex - Longitudinal Joint (final drafts)
 - PM - Diamond Grinding / GeoTech – Subbase Materials (starting)
 - 4 Topics for Future each needs more information (start in 1-2 months)
 - a. GeoTech - Subgrade Design for New and Reconstructed
 - b. Rigid – Design and Performance of Concrete Unbonded Overlays
 - c. Rigid - Repair of Joint Associated Distress Pavements
 - d. PM - Pavement preservation approaches lightly surfaced roadways

NRRRA Short Term Technology Transfer Topics		NRRRA Long Term Research		
SRF Consulting under contract		NRRRA Team	Title	Contractor
Flex	Tack Coats	Flex	HMA Overlay of PCC & Methods in Enhancing Compaction	University of New Hampshire
Flex	Longitudinal Joint Construction Performance		Cold Central Plant Recycling	American Engineering and Testing
Rigid	Design and Performance of Concrete Unbonded Overlays	Rigid	Fiber Reinforced Concrete Pavements	University of Minnesota Duluth
Rigid	Repair of Joint Associated Distress Pavements		Early Opening Strength to Traffic	University of Pittsburgh
Geo	Larger Subbase Materials		Optimizing the PCC Mix Components	Iowa State
Geo	Subgrade Design for New and Reconstructed	Geo	Recycled Aggregates and Larger Subbase Materials	Iowa State
PM	Surface Characteristics of Diamond Ground PCC Surfaces	PM	Maintaining Poor Pavements	SRF Consulting
PM	Pavement preservation approaches for lightly surfaced roadways		Partial Depth Repair	Braun Intertec

4. **Team Efforts** (Ben Worel + Team Members)
 - a. Flexible Team
 - b. Rigid Team
 - i. Proposed compacted concrete research (~150K) effort related to the Missouri construction that is taking place in 2018

National Road Research Alliance
Executive Committee Meeting Notes (online meeting)
March 22, 2018
12:00 – 1:30pm CST

- ii. EC asked for a more detailed proposal to react to including costs for instrumentation, research, monitoring
 - iii. EC will do an online vote on this topic or wait till the May meeting
 - c. Pavement Maintenance
 - d. Geotechnical Team
 - e. Technology Transfer Team
 - i. New Chair Needed – Curt Turgeon MnDOT will be the new team leader after discussion with the EC members.
 - ii. State Training Requests / PEER Exchanges
 - iii. Sharing of technical Reports as developed in Newsletter
 - f. New Team Proposed – Emerging Technologies
 - i. EC was ok with this idea and did not support or reject the idea. MnDOT will pursue this with the associate members who are pushing for this new team. More details later – expect an email to announce this new team.
- 5. May Workshop (May 23-24) (Bob Filipczak)**
 - a. Agenda was reviewed
 - b. State Paid Trips (4 / state = 20 trips)
 - c. First 50 students get free registrations
 - d. Teams to develop their Day 1 (1 hour) and Day 2 (2 hour) agendas
- 6. Future Innovation – Call for Ideas (Ben Worel)**
 - a. Automated / Connected Vehicles Research
 - b. Automated / Connected Vehicles Pavements
 - c. Maintenance Plans
 - d. Rejuvenators
- 7. Round Robin**
 - a. Announcements
 - b. Needs / Concerns

National Road Research Alliance

Executive Committee Meeting Notes (online meeting)

March 22, 2018

12:00 – 1:30pm CST

Budget Attachment

NRRA Funding Summary													
NRRA Income (All Sources)													
					Planning		Spending						
Funding Group	Description				Total Funding	Budgeted (below)	Available (to use)	Budgeted Spent	Budgeted Remaining	Comment			
States (SPR)	SPR - Pooled Funds (6 States)				\$ 2,450,000	2,388,848	61,152			CA short \$100K in 2017			
Partnership (Associates)	MnDOT Partnerships (46 members - but on different schedules - assumed dollar amount for now)				\$ 216,000	54,000	162,000						
Partnership (Wisconsin)	Wisconsin Partnership (State Funding used instead of SPR)				\$ 150,000		150,000			Agreement ends 6/30/2019			
Total					\$ 2,816,000	\$ 2,442,848	\$ 373,152	\$ -	\$ -				
MnDOT Funds	Regular MnDOT STIP (construction)				\$ 3,132,681	3,132,681	-						
MnDOT Funds	Regular MnDOT Operations Funds				\$ 96,689	96,689	-						
Total					\$ 3,229,370	\$ 3,229,370	\$ -	\$ -	\$ -				
Funding groups all have unique charge accounts for tracking					Grand Totals	\$ 6,045,370	\$ 5,672,218	\$ 373,152	\$ -	\$ -			
NRRA Funding (SPR+Associates+W) Splits by NRRA Focus Areas													
					Planning		Spending						
SPR (Pooled Fund) Split Summary					Available (by percent)	Budgeted (below)	Available (to use)	Budgeted Spent	Budgeted Remaining	Comment			
Marketing - 5%					140,800	130,000	10,800						
Technology Transfer - 30%					844,800	370,000	474,800						
Research - 65%					1,830,400	1,942,848	(112,448)						
Total					2,816,000	2,442,848	373,152	-	-				
NRRA Spending Budget													
NRRA Focus Areas	Effort Type	Item (Letter.#)	Project Charge	General Outcome / Deliverable	Vendors	Funding Budget	Approved Date	Current Budget Funding					
								SPR		Partnerships		MnDOT	
								Budget	Spent	Budget	Spent	Budget	Spent
5% (M) Marketing	Labor	M1.1	TPF15341A	MNDOT Labor - (Website, Monthly Newsletter, Written Documents/Marketing)	MnDOT	125,000	Jan 17	125,000	-	-	-	-	-
	Purchase	M1.2	Partnership	Promotional Items / Printing Costs	MnDOT PO	5,000	Jan 17	-	-	5,000	-	-	-
	Purchase	T1.1	TPF15341	Agency travel / meals / meeting room costs	MNDOT PO	115,000	Jan 17	115,000	-	-	-	-	-
	Contract	T1.2	TPF15341	Communication (Written, Newsletter, video, Website)	TBD	40,000	Jan 17	40,000	-	-	-	-	-
	Contract	T1.3.1	TPF15341	Tech transfer write-ups (Consultant) - Topics Below	SRF	160,000	Jan 17	100,000	-	-	-	-	-
					Remaining \$		Jan 17	60,000	-	-	-	-	-
	Labor	T1.3.2	TPF15348	Tech transfer write-ups (MnDOT Labor) - Topics Below	MnDOT	30,000	May 17	30,000	-	-	-	-	-
30% Tech Transfer (T)		T1.3.3		Tack Coats									
		T1.3.4		Longitudinal Joint Construction Performance									
		T1.3.5		Design and Performance of Concrete Unbonded Overlays									
		T1.3.6		Repair of Joint Associated Distress Pavements									
		T1.3.7		Larger Subbase Materials									
		T1.3.8		Subgrade Design for New and Reconstructed									
		T1.3.9		Surface Characteristics of Diamond Ground PCC Surfaces									
		T1.3.10		Pavement preservation approaches for lightly surfaced roadways									
		T1.3.11		Partial Depth Repairs of Concrete									
		Purchase	T1.4	Partnership	Equipment	TBD	25,000	Jan 17	-	-	25,000	-	-
	Purchase	R1.1	TPF15341	Sensor Purchase	MnDOT PO	159,130	Mar 17	159,130	-	-	-	-	
	Purchase	R1.2	TPF15341	Sample Buckets	MnDOT PO	4,000	May 17	-	-	4,000	-	-	
	Labor	R1.3	TPF1534C	Inspection (MnDOT) - MnDOT approved operating funds for any additional costs over the initial budget - MnDOT fund from Dec 17 budget report	MnDOT	81,149	Mar 17	50,400	-	-	-	30,749	
	Labor	R1.4	TPF1534D	MnROAD Staff - Construction, Sensors and Performance Monitoring MnDOT approved operating funds for any additional costs - 120K approved by EC - MnDOT fund from Dec 17 budget report	MnDOT	440,258	Mar 17	279,318	-	-	-	40,940	
		R2.4		Approved extra funding for monitoring			Dec 17	120,000	-	-	-	-	
	Contract	R1.5	TPF15341	PCC Sampling/Testing	AET Consultant	75,000	May 17	20,000	-	-	-	-	
		R2.5		Additional Funding Approved (low initial estimate)			July 17	55,000	-	-	-	-	
	Contract	R1.6	TPF15341	HMA Performance Testing (75K original Estimate)	TBD	75,000	May 17	75,000	-	-	-	-	
	Contract	R1.7	TPF15341	Partial Depth Repairs Construction (not in construction contract)	Diamond Surfacing	80,000	May 17	40,000	-	-	-	-	
		R2.7		Additional Funding Approved			July 17	40,000	-	-	-	-	
	Contract	R1.8	TPF15341	Compacted Concrete Pavement Construction (not in construction) - \$50K original	Not Done	-	May 17	-	-	-	-	-	
				Will not do - changed to S0			Dec 17?	-	-	-	-	-	
	Contract	R1.9	TPF15341	Diamond Grinding Construction (not in construction contract) - \$50K	Not Done	-	May 17	-	-	-	-	-	
				Will not do - changed to S0			Dec 17?	-	-	-	-	-	
65% Research (R)		R1.10	TPF15341	HMA Overlay and Rehab of Concrete and Methods of Enhancing Compaction	UNH		May 17	150,000	-	-	-	-	
		R1.11	TPF15341	Cold Central Plant Recycling	AET Consultant		May 17	100,000	-	-	-	-	
		R1.12	TPF15341	Fiber Reinforced Concrete Pavements	UMD		May 17	150,000	-	-	-	-	
		R1.13	TPF15341	Long Term Effects of Diamond Grinding - \$75k	Not Done		May 17	-	-	-	-	-	
				Will not do - changed to S0			Dec 17	-	-	-	-	-	
		R1.14	TPF15341	Concrete Early Opening Strength to Traffic	UofPitt		May 17	150,000	-	-	-	-	
		R1.15	TPF15341	Optimizing the Concrete Mix Components for Contractors	Iowa State	1,080,000	May 17	150,000	-	-	-	-	
		R1.16	TPF15341	Compacted Concrete Pavements for Local Streets - \$80K	Not Done		May 17	-	-	-	-	-	
				Will not do - changed to S0			Dec 17	-	-	-	-	-	
		R1.17	TPF15341	Recycled Aggregates in Aggregate Base and Larger Subbase Materials	Iowa State		May 17	225,000	-	-	-	-	
		R1.18	TPF15341	Maintaining Poor Pavements	SRF		May 17	80,000	-	-	-	-	
		R1.19	TPF15341	Partial Depth Repair	Braun Inertec		May 17	75,000	-	-	-	-	
	R1.20	TPF15341?		Uretk Funding - new number	Uretk	20,000	July 17	-	-	20,000	-	-	
FHWA Grant(G)	Contract	G1.1	MnDOT	Data - Website Interface FHWA originally planned at \$25K but did not take place - MnDOT then funded	iEngineering	25,000	Nov 17	-	-	-	-	25,000	
MnDOT Funds (M)	Many Items	M1.1	T00547	Labor and purchasing as donation to the NRRA Effort - just like other states are donating - do we want/need to show this?	NA	Will Track Timesheets							
Construction MnDOT (M)	Contract	M1.2	MnDOT	MnDOT Funding of ~36- 500' equivalent test cells	C.S. McCrossan	3,132,681	May 17	-	-	-	-	3,132,681	
Totals =						5,672,218		2,388,848	-	54,000	-	3,229,370	-
Remaining =						(5,672,218)							