

**Clear Roads Budget Overview
April 2017**

Overall Budget for #TPF-5(218)

Description	Amount
Total anticipated income through 2016 under MnDOT TPF-5(218)	\$4,530,000.00
Transfer of funds from TPF-5(092)	\$200,748.86
One-time FHWA Contribution and MnDOT 20% Match	\$62,500.00
Expenses under TFP-5(218)	\$4,754,029.44

Remaining Available Funds \$39,219.42

Breakdown of Designated Synthesis Funding (Subset of Expenses Above)

Description	Amount
Total funding approved by TAC and added to CTC's contract in 2015	\$49,979.00
Winter data survey project for 2014-2015 season (actual)	\$12,546.00
Winter data survey project for 2015-2016 season (actual)	\$6,580.50
Winter data survey project Roads & Bridges article (actual)	\$2,050.00
Wash bays synthesis (actual)	\$10,516.50
Salt stockpiles synthesis (actual)	\$11,746.50
Paint and Tape for Truck Conspicuity (budgeted)	\$4,920.00

Available funds for new synthesis projects \$1,619.50

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Income

State	Years funds committed	Total amt. committed	Total expected to be paid thru 2016	Total paid as of today
*AK	2015, 2016, 2017	\$60,000	\$60,000	\$60,000
AZ	2016	\$25,000	\$25,000	\$25,000
CA	2013, 2014, 2015, 2016	\$100,000	\$100,000	\$100,000
CO	2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	\$200,000	\$200,000	\$200,000
**CT	2014, 2015, 2016	\$65,000	\$65,000	\$65,000
DE	2015	\$25,000	\$25,000	\$25,000
IA	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
ID	2012, 2013, 2014, 2015, 2016	\$125,000	\$125,000	\$125,000
IL	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
IN	2010, 2016	\$50,000	\$50,000	\$50,000
KS	2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018	\$150,000	\$150,000	\$150,000
MA	2011, 2012, 2013, 2014, 2015	\$125,000	\$150,000	\$125,000
ME	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
MI	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
*** MN	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$180,000	\$180,000	\$180,000
MO	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
MT	2012, 2013, 2014, 2015, 2016	\$125,000	\$125,000	\$125,000
ND	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
NE	2011, 2012, 2013, 2014, 2015, 2016	\$150,000	\$150,000	\$150,000
NH	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
NY	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
OH	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
OR	2013, 2014, 2015, 2016	\$100,000	\$100,000	\$100,000
PA	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
RI	2012, 2013, 2014, 2015	\$100,000	\$125,000	\$100,000
SD	2014, 2015, 2016	\$75,000	\$75,000	\$75,000
UT	2011, 2012, 2013, 2014, 2015, 2016	\$150,000	\$150,000	\$150,000
VA	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
VT	2012, 2014, 2015, 2016	\$100,000	\$100,000	\$100,000
WA	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$150,000
WI	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
WV	2012, 2013, 2014, 2015, 2016	\$125,000	\$125,000	\$125,000
WY	2010, 2011, 2012, 2013, 2014, 2015, 2016	\$175,000	\$175,000	\$175,000
Bold years indicate that Clear Roads has received the funds.		\$4,480,000	\$4,530,000	\$4,455,000

Notes

* **Alaska** transferred \$60k to cover 2015, 2016, and \$10K in 2017.

** **Connecticut** transferred \$15K in 2016 and will transfer \$35K in 2017 to the new TPF#.

*** **Minnesota** transferred an extra \$5,000 to cover an additional \$5,000 transferred to PNS in error.

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Expenses

Description	Amount
Pre-Contract Projects (estimated cost)	
Developing Test Bed Software to Qualify Plug and Play Technology (RFP)	\$108,161.00
Aurora WSI Update/Enhancement Partnership	\$20,000.00
Projects in Progress (contract amount)	
GPS/AVL Case Studies	\$113,697.53
Identification of Mobile Technologies for the Assessment of Winter Road Conditions	\$152,397.04
Emergency Ops Methodology for Extreme Winter Storm Events	\$59,030.00
Weather Event Reconstruction and Analysis Tool	\$57,549.20
Training Video for the Implementation of Liquid Only Plow Routes	\$71,160.81
Synthesis of Material Application Methodologies for Winter Operations	\$117,658.00
Identification and Recommendations for Correction of Equipment Factors Causing	\$200,000.00
Snow Removal Performance Metrics	\$74,640.00
CTC Synthesis Projects (Winter Data Survey, Salt Stockpiles, Wash Bays)	\$49,979.00
Quantifying the Impact that New Capital Projects will have on Roadway Snow and Ice	\$145,622.00
Developing a Training Video and Manual for Best Practices and Techniques in	\$99,994.00
Snowplow Operator and Supervisor Training, plus Winter Driver Education Program	\$124,857.00
Understanding the Performance of Snow and Ice Control Agents on Porous or	\$185,000.00
Completed Projects (actual project expenditures, unless stated otherwise)	
Plug and Play Phase II	\$81,690.00
North American Study on Contracting Snow and Ice Response	\$74,983.00
Snow Plow Route Optimization	\$68,305.00
Synthesis on GPS/AVL Equipment Used for Winter Maintenance	\$59,912.05
Understanding the Effectiveness of Non-Chloride Liquid Agricultural By-Products and	\$191,238.00
Roadway Salt Management Best Practices Manual	\$58,171.00
Use Of Equipment Lighting During Snow Plow Operations	\$40,406.00
Cost Benefit Analysis of Various Winter Maintenance Strategies	\$121,730.00
Best Practices for the Prevention of Corrosion to DOT Equipment: A User's Manual	\$49,950.00
Snow and Ice Control Environmental Best Management Practices Manual	\$180,107.00
Winter Severity Mapping Enhancement	\$4,767.50
Establishing Effective Salt and Anti-icing Application Rates	\$82,602.23
Comparison of Material Distribution Systems	\$44,960.00
Environmental Factors Causing Fatigue in Snowplow Operators	\$124,991.00
Development of a Totally Automated Spreading System	\$72,025.00
Cost-Benefit Analysis Toolkit Phase 2	\$109,999.00
Determining the Toxicity of Deicing Materials	\$85,098.26
Understanding the True Costs of Snow and Ice Control Operations	\$150,774.60
Aurora Wiki Site	\$9,000.00
Pacific Northwest Snowfighters (PNS) (\$30K in 2012, \$30K in 2015)	\$60,000.00

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Expenses

Completed Projects (continued)	
Snow Removal at Extreme Temperatures	\$32,871.00
Weather Severity Mapping	\$49,307.71
Video for Determining Effectiveness of Deicing Materials and Procedures	\$20,465.00
2011 Peer Exchange	\$19,825.73
2013 Peer Exchange	\$34,733.62
2015 Peer Exchange	\$40,996.20
Meeting Expenses	
AASHTO SCOM and 2012 Fall Meeting Amendment (actual expenditures)	\$12,363.55
FY 2010 Meeting expenses (travel, meeting space, meals, etc. - actual expenditures)	\$7,587.00
2010 PNS Conference (travel for Chairman to attend PNS meeting)	\$496.60
FY 2011 Meeting expenses (travel, meeting space, meals, etc. - actual expenditures)	\$40,686.81
FY 2012 Meeting Expenses (travel, meeting space, meals, etc. - actual expenditures)	\$61,886.57
FY 2013 Meeting expenses (travel, meeting space, meals, etc. - actual expenditures)	\$61,733.35
FY 2014 Meeting expenses (travel, meeting space, meals, etc. - actual expenditures)	\$56,814.72
FY 2015 Meeting expenses (travel, meeting space, meals, etc. - actual expenditures)	\$84,939.36
FY 2016 Meeting expenses (travel, meeting space, meals, etc. - actual expenditures)	\$79,098.06
TRB 2016 International Conference on Winter Maintenance and Surface	\$1,250.00
FY 2017 Spring Meeting (estimate)	\$50,000.00
Administrative and Information Services Expenses	
2010 Admin. and Info. Services, web hosting (actual expenditures Jan. to Dec. '10)	\$76,475.30
2011 Admin. and Info. Services, web hosting (actual expenditures Jan. to Sep. '11)	\$61,836.30
2011-12 Admin. and Info. Services, web hosting (actual expenditures Oct. '11 to Sep.	\$97,160.00
2012-13 Admin. and Info. Services, web hosting (actual expenditures Oct. '12 to Jun.	\$89,466.34
2013-2017 Admin. and Info. Services, web hosting contract	\$523,581.00
<i>Original contract for July 2013 to March 2015: \$224,900.00</i>	
<i>Contract renewal for April 2015 to August 2016: \$173,611.00</i>	
<i>Contract renewal for September 2016 to September 2017: \$125,070.00</i>	
Total	\$4,754,029.44