

**MICHIGAN DEPARTMENT OF TRANSPORTATION  
COMPLETE LIST OF SPR-II RESEARCH REPORTS**

February 2025

\*Report numbers that are italicized are unavailable

Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-001</a>	Research Activities of Michigan State Highway Department	J. W. Kushing	Jul-40	Administration & Management
<a href="#">SPR-002</a>	Field Study of Joint Sealer	J. W. Kushing	Oct-40	Pavement Design & Pavement Performance
<a href="#">SPR-003</a>	Michigan Test Road	J. W. Kushing	Nov-40	Roadway Design
<a href="#">SPR-004</a>	Investigational Concrete Pavement in Michigan	J. W. Kushing	Jan-40	Pavement Design & Pavement Performance
<a href="#">SPR-005</a>	Design of Load Transfer Joints in Concrete Pavements	J. W. Kushing, W. O. Fremont	Nov-40	Pavement Design & Pavement Performance
<a href="#">SPR-006</a>	Changes in Characteristics of Slow-curing Asphaltic Oils	E. A. Finney, T. Wolczynski	Nov-40	Materials
<a href="#">SPR-007</a>	Activities of Research Division	J. W. Kushing	Jan-41	Administration & Management
<a href="#">SPR-008</a>	Summary Michigan Test Road	E. A. Finney	Jan-41	Roadway Design
<a href="#">SPR-009</a>	Value of Concrete Spreader in Concrete Pavement Construction	J. W. Kushing	Jan-41	Pavement Design & Pavement Performance
<a href="#">SPR-010</a>	Pavement Joints and Their Functions	J. W. Kushing	Jan-41	Pavement Design & Pavement Performance
<a href="#">SPR-011</a>	Concrete Durability Studies	E. A. Finney	Feb-41	Pavement Design & Pavement Performance
<a href="#">SPR-012</a>	Construction of Michigan Test Road	J. W. Kushing	Feb-41	Roadway Design
<a href="#">SPR-013</a>	Natural Conditions Affecting Performance of Soils	J. W. Kushing	Mar-41	Environmental
<a href="#">SPR-014</a>	Fundamental Principles and Factors Embodied in the Michigan Test Road	J. W. Kushing	Apr-41	Roadway Design
<a href="#">SPR-015</a>	A Report on Manufactured Stone Sand and Its Use in Concrete Mixtures	E. A. Finney	May-41	Materials
<a href="#">SPR-016</a>	Report on Claims Presented by W. L. Thon Company Contractor Michigan Test Road	C. Mansfield	May-41	Roadway Design
<a href="#">SPR-017</a>	Proposed Specifications for a Slow-Curing Liquid Asphalt	J. W. Kushing, E. A. Finney	Jun-41	Materials
<a href="#">SPR-018</a>	Construction and Subsequent Studies of Concrete Durability Project Michigan Test Road	J. W. Kushing	Jul-41	Pavement Design & Pavement Performance
<a href="#">SPR-019</a>	The Library-Laboratory Research	J. W. Kushing	Aug-41	Administration & Management

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<a href="#">SPR-020</a>	Movie of Michigan Test Road Pictures and Script	E. A. Finney	Aug-41	Roadway Design
<a href="#">SPR-021</a>	The Michigan Test Road	J. W. Kushing, E. A. Finney	Sep-41	Roadway Design
<a href="#">SPR-022</a>	Research Activities of Michigan State Highway Department	J. W. Kushing	Nov-41	Administration & Management
<a href="#">SPR-023</a>	General Observations on Concrete Scaling	J. W. Kushing	Dec-41	Pavement Design & Pavement Performance
<a href="#">SPR-024</a>	Comments on Concrete Scaling Studies	J. W. Kushing	Dec-41	Pavement Design & Pavement Performance
<a href="#">SPR-025</a>	Effect of Various Axle Loadings on Highway Pavements	W. C. Fremont	Feb-42	Pavement Design & Pavement Performance
<a href="#">SPR-026</a>	Selected Bibliography on Airport Construction for National Defense	W. M. Cardone	Feb-42	Multi-Modal
<a href="#">SPR-027</a>	Flight Strips – Design and Construction	E. A. Finney	Mar-42	Multi-Modal
<a href="#">SPR-028</a>	Summary of Research Projects	E. A. Finney	Apr-42	Administration & Management
<a href="#">SPR-029</a>	Agrifil as a Mineral Filler for Bituminous Mixtures	E. A. Finney	Apr-42	Materials
<a href="#">SPR-030</a>	Construction of Experimental Soil-Cement Stabilization Road Surface, Stockbridge, Michigan	E. A. Finney, T. H. Thornburn	Apr-42	Construction
<a href="#">SPR-031</a>	Curing of Concrete by Calcium Chloride Integral Mixed	E. A. Finney	Apr-42	Materials
<a href="#">SPR-032</a>	Grayling Cement and Bituminous Soil Stabilization Projects	E. A. Finney, S. M. Cardone, T. Wolczynski, T. H. Thornburn	May-42	Environmental
<a href="#">SPR-033</a>	Progress Report on Membranous Curing Compound	E. A. Finney	May-42	Materials
<a href="#">SPR-034</a>	Limestone Dust in Mortar	E. A. Finney	Jun-42	Materials
<a href="#">SPR-035</a>	Research Laboratory Report for Biennium 1940-1942	E. A. Finney	Jul-42	Administration & Management
<a href="#">SPR-036</a>	Progress Report on Cooperate Research Project Between Michigan State Highway Department and Michigan College of Mining and Technology, December, 1941-July, 1942	W. A. Karanen	Jul-42	Administration & Management
<a href="#">SPR-037</a>	Summary Activities of Research Laboratory Located at Michigan State College	E. A. Finney	Aug-42	Administration & Management
<a href="#">SPR-038</a>	Color Treatment of Concrete Pavements for Camouflage Purposes	E. A. Finney	Jul-42	Pavement Design & Pavement Performance

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<a href="#">SPR-039</a>	Concrete Durability Study: Accelerated Scaling Studies on Concrete Pavement Surfaces	E. A. Finney	Aug-42	Pavement Design & Pavement Performance
<a href="#">SPR-040</a>	Progress Report on Reflectorized Sign Material Investigation	E. A. Finney	Nov-42	Materials
<a href="#">SPR-041</a>	A Digest of the Michigan Test Road for American Concrete Institute	E. A. Finney	Dec-42	Roadway Design
<a href="#">SPR-042</a>	Discoloration Phenomenon in Beaded Reflectorized Highway Sign Materials	C. C. Rhodes	Jan-43	Materials
<a href="#">SPR-043</a>	Research Activities, 1939 – 1943	E. A. Finney	May-43	Administration & Management
<a href="#">SPR-044</a>	Color in Concrete Pavements	E. A. Finney	May-43	Pavement Design & Pavement Performance
<a href="#">SPR-045</a>	Design of Concrete Resurfacing	E. A. Finney	May-43	Pavement Design & Pavement Performance
<a href="#">SPR-046</a>	Design Recommendations for Industrial Express Highway	E. O. Finney, W. O. Fremont	Jun-43	Roadway Design
<a href="#">SPR-047</a>	Determination of Young's Modulus of Frozen and Thawed Concrete Specimens by Sonic Method	E. A. Finney, C. C. Rhodes	Aug-43	Pavement Design & Pavement Performance
<a href="#">SPR-048</a>	Michigan's Experiences in the Use of Air Entraining Materials for Concrete Pavement Construction	E. A. Finney	Oct-43	Pavement Design & Pavement Performance
<a href="#">SPR-049</a>	"Sealz" Joint Seal Study	E. A. Finney, C. C. Rhodes	Jan-44	Pavement Design & Pavement Performance
<a href="#">SPR-050</a>	Report on Condition Survey of Concrete Capping Projects in Michigan	E. A. Finney, A. Matthews	Mar-44	Pavement Design & Pavement Performance
<a href="#">SPR-051</a>	The Research Laboratory	E. A. Finney	Mar-44	Administration & Management
<a href="#">SPR-052</a>	Compilation of Design and Construction Data for Concrete Pavements on the State Trunkline System	E. A. Finney	Jun-44	Pavement Design & Pavement Performance
<a href="#">SPR-053</a>	Para-Plastic Joint Sealing Compounds	E. A. Finney	Jun-44	Pavement Design & Pavement Performance
<a href="#">SPR-054</a>	Air-Entrained Concrete	E. A. Finney	Jun-44	Pavement Design & Pavement Performance
<a href="#">SPR-055</a>	Report on Research Laboratory – 1943-1944	E. A. Finney	Jun-44	Administration & Management
<a href="#">SPR-056</a>	Study of Blowups on Bituminous-Capped Pavements	E. A. Finney	Jul-44	Pavement Design & Pavement Performance
<a href="#">SPR-057</a>	Study of Transit-Mixed Concrete in Relation to a Proposed Change in Batch Quantities on Construction Project 9-8, C3 Study No. 1	E. A. Finney	Aug-44	Pavement Design & Pavement Performance
<a href="#">SPR-058</a>	Study of Concrete Pavement Cracking on Project 49-7, C1	E. A. Finney	Sep-44	Pavement Design & Pavement Performance

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<a href="#">SPR-059</a>	Preliminary Progress Report on Design Projects Michigan Test Road	E. A. Finney	Oct-44	Roadway Design
<a href="#">SPR-060</a>	Research Laboratory Report for Biennium 1942-1944	E. A. Finney	Oct-44	Administration & Management
<a href="#">SPR-061</a>	Microscopic Study of Scaled and Unscaled Concrete	E. A. Finney	Nov-44	Pavement Design & Pavement Performance
<a href="#">SPR-062</a>	Recommendations for the Design of Concrete Pavement	E. O. Finney, W. O. Fremont	Nov-44	Pavement Design & Pavement Performance
<a href="#">SPR-063</a>	Use of Vinsol Resin Cement in Concrete Bridge Structures	C. C. Rhodes	Nov-44	Bridge & Special Structures Design
<a href="#">SPR-064</a>	Pavement and Subgrade Moisture Michigan Test Road	C. C. Rhodes	Dec-44	Roadway Design
<a href="#">SPR-065</a>	Hardening of Wood by Chemical Processes	C. C. Rhodes	Dec-44	Materials
<a href="#">SPR-066</a>	Concerning Changes in Senate Bill No. 102 Relative to Motorbuses	E. A. Finney	Feb-45	Multi-Modal
<a href="#">SPR-067</a>	Study of Subsoil Pressures Between Abutments At Grade Separation Structures, The Detroit Industrial Expressway Section 3	G. O. Kerhoff, L. D. Childs	Apr-45	Environmental
<a href="#">SPR-068</a>	The Design of Concrete Pavements for Post War Construction	E. A. Finney	Mar-45	Pavement Design & Pavement Performance
<a href="#">SPR-069</a>	Determination of Benzene in Bituminous Materials	B. W. Pocock	Apr-45	Materials
<a href="#">SPR-070A</a>	Asphaltic Oil-Latex Joint-Sealing Compound	B. W. Pocock	Apr-45	Pavement Design & Pavement Performance
<a href="#">SPR-071</a>	Report on Research Laboratory, 1944-1945	E. A. Finney	Jul-45	Administration & Management
<a href="#">SPR-072</a>	A Model Study of Slab Action Concrete Pavements	L. D. Childs	Jul-45	Pavement Design & Pavement Performance
<a href="#">SPR-073</a>	Inspection of Concrete Pavements in the Province of Ontario, Canada	E. A. Finney	Jun-45	Pavement Design & Pavement Performance
<a href="#">SPR-074</a>	The Application of Chloride Salts to Concrete Pavements for Ice Control	C. C. Rhodes	Aug-45	Materials
<a href="#">SPR-074A</a>	The Application of Chloride Salts for Ice Control to Concrete Pavements Constructed Without the Use of Air-Entraining Agents	C. C. Rhodes	Aug-45	Materials
<a href="#">SPR-075</a>	Factors to be Considered in the Use of Air-Entrained Concrete for Highway Construction	E. A. Finney, C. C. Rhodes	Sep-45	Pavement Design & Pavement Performance
<a href="#">SPR-076</a>	Investigations of Anti-Freeze Preparations	B. W. Pocock	Dec-45	Materials
<a href="#">SPR-077</a>	Investigations Kapco Membrane Curing Compounds	B. W. Pocock	Dec-45	Materials

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<a href="#">SPR-078</a>	The Muskegon Experimental Project after Seven Years in Service	E. A. Finney	Dec-45	Pavement Design & Pavement Performance
<a href="#">SPR-079</a>	Prevention of Scale on Concrete Pavement Surfaces by Air Entrainment	E. A. Finney	Jan-46	Pavement Design & Pavement Performance
<a href="#">SPR-080</a>	A Model Study of Slab Action in Concrete Pavements	L. D. Childs	Jan-46	Pavement Design & Pavement Performance
<a href="#">SPR-081</a>	Comments on Bituminous-Rubber Joint Sealing Compounds	B. W. Pocock	Jan-46	Pavement Design & Pavement Performance
<a href="#">SPR-082</a>	Condition Survey Grayling Soil Stabilization Experimental Project – 1946	S. M. Cardone	Apr-46	Environmental
<a href="#">SPR-083</a>	First Condition Survey of Hot-Poured Bituminous-Rubber Joint Seal Investigation on US 16, West of Lansing	E. A. Finney	May-46	Pavement Design & Pavement Performance
<a href="#">SPR-084</a>	Investigation of Hinged Bar Mat	R. S. Fulton, S. M. Cardone	Jun-46	Materials
<a href="#">SPR-085</a>	Research Laboratory Report, 1945 – 1946	E. A. Finney	Jul-46	Administration & Management
<a href="#">SPR-086</a>	Investigation of Pen-Kote “500” Maintenance Paint	B. W. Pocock	Jul-46	Materials
<a href="#">SPR-087</a>	The Preserving and Reconditioning of Concrete Bridges	C. C. Rhodes	Sep-46	Bridge & Special Structures Design
<a href="#">SPR-088</a>	Non-Skid Bituminous Surface Treatments Project M5-17, C2 and M89-5, C3	E. A. Finney	Oct-46	Pavement Design & Pavement Performance
<a href="#">SPR-089R</a>	Cracked Versus Uncracked Asphaltic Materials	E. A. Finney, C. C. Rhodes	Oct-46	Materials
<a href="#">SPR-090</a>	A Study of Slab Action in Concrete Pavements	L. D. Childs	Oct-46	Pavement Design & Pavement Performance
<a href="#">SPR-091</a>	Investigation of Concrete Paving Forms	R. S. Fulton, S. M. Cardone	Dec-46	Pavement Design & Pavement Performance
<a href="#">SPR-091A</a>	Investigation of Concrete Paving Forms	R. S. Fulton, S. M. Cardone	Apr-47	Pavement Design & Pavement Performance
<a href="#">SPR-092</a>	Modern Highway Loadings in Relation to Pavements and Bridges	E. A. Finney	Jan-47	Bridge & Special Structures Design
<a href="#">SPR-093</a>	Gradation and Consolidation of Porous Backfill	R. Greenman	Feb-47	Materials
<a href="#">SPR-094</a>	Resealing of Old Expansion Joints with Bituminous Rubber Compound In Relation to Highway Maintenance	B. W. Pocock, W. Martin	Mar-47	Pavement Design & Pavement Performance
<a href="#">SPR-095</a>	Experience in the Use of Carbon Black as a Color Pigment in Concrete Pavement	C. C. Rhodes	Mar-47	Materials
<a href="#">SPR-096</a>	Bituminous Fiber Board for Joints	E. A. Finney	May-47	Pavement Design & Pavement Performance

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<a href="#">SPR-097</a>	Abnormal Cracking and Settlement of Pavement Slabs in the Willow Run and Detroit Industrial Expressway Systems	E. A. Finney	Apr-47	Pavement Design & Pavement Performance
<a href="#">SPR-098</a>	Compressed Wood for Expansion Joint Fillers	B. W. Pocock	May-47	Pavement Design & Pavement Performance
<i>SPR-099</i>	<i>The Research Laboratory – No Report – See SPR-100</i>	<i>E. A. Finney</i>	<i>Jul-47</i>	<i>Not Available</i>
<a href="#">SPR-100</a>	Report on Research Laboratory, 1946 – 1947	E. A. Finney	Jul-47	Administration & Management
<a href="#">SPR-101</a>	“Sealz Melter” Heating Kettle for Rubber Joint Sealing Compound	E. A. Finney	Sep-47	Pavement Design & Pavement Performance
<a href="#">SPR-102</a>	Liquid Chloride Application Study	E. A. Finney	Sep-47	Materials
<a href="#">SPR-103</a>	Rubber Compound Heating Kettle, Chausse Model R-115	L. L. Peterson	Sep-47	Materials
<a href="#">SPR-104</a>	Progress Report on Load Deflection Tests Dealing with Length and Size of Dowels	E. A. Finney, W. O. Fremont	Nov-47	Materials
<a href="#">SPR-105</a>	Cracking of Concrete Patches on Project 49-7, C1 US-2 North of St. Ignace	E. A. Finney	Dec-47	Pavement Design & Pavement Performance
<a href="#">SPR-106</a>	Progress Report on Study of Turf Growth on Soil Mixtures Available for Highway Shoulder Construction in Michigan	E. A. Finney, J. Tyson	Dec-47	Environmental
<a href="#">SPR-107</a>	Consolidation of Porous Backfill	R. Greenman	Jan-48	Materials
<a href="#">SPR-108</a>	Detroit Manufactured Brick for Catch Basins and Manholes	E. A. Finney	Mar-48	Materials
<a href="#">SPR-109</a>	The Use and Treatment of Granular Backfill	R. Greenman	Mar-48	Materials
<a href="#">SPR-110</a>	Deterioration and Restoration of Concrete Bridges on the State Trunkline System	E. A. Finney, C. C. Rhodes	Sep-48	Bridge & Special Structures Design
<a href="#">SPR-111A</a>	Study of New American Decalcomania Reflective Material	C. C. Rhodes, L. L. Peterson	Mar-48	Materials
<a href="#">SPR-112</a>	More Durable Concrete by Air Entrainment	E. A. Finney	Apr-48	Pavement Design & Pavement Performance
<a href="#">SPR-113</a>	A Study of Fabrics for Membrane and Joint Waterproofing	L. L. Peterson	Jun-48	Pavement Design & Pavement Performance
<a href="#">SPR-114</a>	Effect of Foreign Material on Quality of Concrete on Project F 43-16, C2	E. A. Finney, C. C. Rhodes	Jun-48	Pavement Design & Pavement Performance
<a href="#">SPR-115</a>	Operational Comparison of Premixed and M.S.H.D. Specification Materials for Reflectorized Centerlines	L. L. Peterson, F. Ballew	Aug-48	Materials
<a href="#">SPR-116</a>	Shoulder Construction Practice in Michigan	E. A. Finney	Nov-48	Construction

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<a href="#">SPR-117</a>	Investigation of Slippery Condition of Stone Sand Concrete Pavement	E. A. Finney	Dec-48	Pavement Design & Pavement Performance
<a href="#">SPR-118</a>	An Appraisal of the Membrane Method of Curing Concrete Pavements	C. C. Rhodes, J. R. Evans	Dec-49	Pavement Design & Pavement Performance
<a href="#">SPR-119</a>	An Improved Sonic Apparatus for Determining the Dynamic Module of Concrete Specimens	C. E. Goodell	Jan-49	Pavement Design & Pavement Performance
<a href="#">SPR-120</a>	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat	E. A. Finney	Jan-49	Asset Management
<a href="#">SPR-121</a>	Field Tests of Reflectorized Traffic Stripes	L. L. Peterson	Jan-49	Materials
<a href="#">SPR-122</a>	Concrete Curb Design	E. A. Finney	Feb-49	Pavement Design & Pavement Performance
<a href="#">SPR-123</a>	Application of White Membrane on Project F 74-42,C1, US-25 North of Port Sanilac	C. C. Rhodes	Mar-49	Materials
<a href="#">SPR-124</a>	Relative Resistance to Thermal and Mechanical Shock of Various 26-A Modified Aggregates Used in Bituminous Concrete Resurfacing	B. W. Pocock	Mar-49	Materials
<a href="#">SPR-125</a>	"Field Check of Design of Positive Type Shear Developers" (A Cooperative Project Between the Bridge Division and the Research Laboratory)	F. S. Weber, L. D. Childs	Mar-49	Bridge & Special Structures Design
<a href="#">SPR-126</a>	Spalling of Joints on Project 14-33, C1	E. A. Finney	Mar-49	Pavement Design & Pavement Performance
<a href="#">SPR-127</a>	An Investigation of Hydron Form Lining	R. S. Fulton	Apr-49	Materials
<a href="#">SPR-128</a>	The Use of Nonshrinking Mortar for Anchoring Bolts in Concrete Members	R. S. Fulton	May-49	Pavement Design & Pavement Performance
<a href="#">SPR-129</a>	Longitudinal Cracking on Project F 17- 42, C2	E. A. Finney	May-49	Pavement Design & Pavement Performance
<a href="#">SPR-130</a>	Performance and Cost Information Relative to Michigan Experiment in Snow and Ice Removal by Radiant Heat	E. A. Finney	May-49	Asset Management
<a href="#">SPR-131</a>	Air-Entraining Concrete on Bridge Project F B 2 of 3-8-1, C1 Plainwell, Michigan	E. A. Finney	May-49	Bridge & Special Structures Design
<a href="#">SPR-132</a>	The Michigan State Highway Research Laboratory, Its Facilities, Its Functions, and Activities	E. A. Finney	Jun-49	Administration & Management
<a href="#">SPR-133</a>	Rust Inhibition of Chloride Salts Used in Ice Control or Dust Palliation	C. C. Sisler, L. L. Peterson	Aug-49	Materials
<a href="#">SPR-134</a>	Cold-Poured Asphalt-Rubber Joint Seal Experiment on M-43	B. Pocock, W. Martin	Aug-49	Pavement Design & Pavement Performance
<a href="#">SPR-135</a>	Placement of Dowels by the Flex-Plane Mechanical Dowel Bar Installer on Project M8-31,C1	E. A. Finney	Sep-49	Materials
<a href="#">SPR-136</a>	Load-Deflection Tests on Corrugated Multi-Plate Sections	G. M. Foster	Nov-49	Pavement Design & Pavement Performance

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<a href="#">SPR-137</a>	Michigan Test Road Design Project, Nine Year Progress Report	E. A. Finney, C. C. Rhodes	Nov-49	Roadway Design
<a href="#">SPR-138</a>	Condition Study of Menominee Tourist Lodge	B. W. Pocock	Nov-49	Tourism
<a href="#">SPR-139</a>	Neoprene Premolded Joint Seal Installation	E. A. Finney	Nov-49	Pavement Design & Pavement Performance
<a href="#">SPR-140</a>	Progress Report on Design Project Michigan Test Road	H. C. Coons	Nov-49	Roadway Design
<a href="#">SPR-141</a>	Study of Corrosion Inhibitors Added to De-icing Chemicals	C. C. Sisler	Dec-49	Materials
<a href="#">SPR-142</a>	Photometric Tests for Reflective Materials	B. W. Rhodes	Dec-49	Materials
<a href="#">SPR-143</a>	Skidding Accidents Occurring on Stone Sand Concrete Pavements, August 1948 to August 1949	E. A. Finney	Dec-49	Pavement Design & Pavement Performance
<a href="#">SPR-144</a>	Experience with Air-Entraining Concrete in New Jersey	C. C. Rhodes	Dec-49	Pavement Design & Pavement Performance
<a href="#">SPR-145</a>	Curing Concrete Pavements with Membranes	C. C. Rhodes	Aug-50	Pavement Design & Pavement Performance
<a href="#">SPR-146</a>	Design and Construction of Joints in Concrete Pavement Surfaces	W. Van Breemen, E. A. Finney	Feb-50	Pavement Design & Pavement Performance
<a href="#">SPR-147</a>	Treated Sawdust for Skid Control on Icy Pavements	C. C. Rhodes	Mar-50	Materials
<a href="#">SPR-148</a>	Experimental Installation of Hydron Form Lining on Bridge West of Ovid – B2 of 19-12-4, C2	R. S. Fulton, C. C. Rhodes	Mar-50	Bridge & Special Structures Design
<a href="#">SPR-149</a>	Pavement Roughness Surveys	E. A. Finney, L. D. Childs	Apr-50	Pavement Design & Pavement Performance
<a href="#">SPR-150</a>	Snow Fence Material Investigation	E. A. Finney	Jun-50	Materials
<a href="#">SPR-151</a>	Load Deflection Tests on Corrugated Metal Sections	M. J. Huber, L. D. Childs	Jun-50	Bridge & Special Structures Design
<a href="#">SPR-152</a>	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat – Performance and Cost Information for Winter Season 1949-1950	E. A. Finney	Aug-50	Asset Management
<a href="#">SPR-153</a>	Evaluation of Bituminous Concrete Surfaces on Stabilized Gravel Base	E. A. Finney, O. L. Stokstad	Aug-50	Pavement Design & Pavement Performance
<a href="#">SPR-154</a>	Inspection of Marshall Creek Aggregate	C. C. Rhodes	Oct-50	Materials
<a href="#">SPR-155</a>	Michigan's Experience in the Use of White-Pigmented Membrane Curing Compound	C. C. Rhodes	Nov-50	Materials
<a href="#">SPR-156</a>	Investigational Concrete Pavement in Michigan Design Project – Michigan Test Road –10 Year Progress Report	H. C. Coons	Dec-50	Roadway Design



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<a href="#">SPR-157</a>	ASTM 1950 Cooperative Check Tests on Pavement Marking Paints	E. A. Finney, B. W. Pocock	Mar-51	Materials
<a href="#">SPR-158</a>	Study of 1950 Traffic Paint Operations	B. W. Pocock	Mar-51	Asset Management
<a href="#">SPR-159</a>	Report on Maryland Road Test One-MD	E. A. Finney	Mar-51	Roadway Design
<a href="#">SPR-160</a>	Comparative Field Study of Different Traffic Paints and Striping Practice	B. W. Pocock	Oct-51	Materials
<a href="#">SPR-161</a>	Progress Report – Neoprene PreMolded Joint Seal Study	B. W. Pocock	Jun-51	Pavement Design & Pavement Performance
<a href="#">SPR-162</a>	Stripping Tests on 18 Asphalt Cements	L. A. Fickes, E. Airola	Oct-51	Pavement Design & Pavement Performance
<a href="#">SPR-163A</a>	A Laboratory Study of Rubber-Asphalt Mixtures for Pavements	L. A. Fickes	Oct-51	Pavement Design & Pavement Performance
<a href="#">SPR-164</a>	Vibrated Concrete Pavement in Michigan	E. A. Finney	Nov-51	Pavement Design & Pavement Performance
<a href="#">SPR-165</a>	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat	E. A. Finney	Dec-51	Asset Management
<a href="#">SPR-166</a>	Michigan Test on Rolled Beam Bridge Using H20-S16 Loading	G. M. Foster, L. D. Childs	Dec-51	Bridge & Special Structures Design
<a href="#">SPR-167</a>	A Discussion of the Principles of Glass Bead Reflectorization	C. C. Rhodes, B. W. Pocock	Dec-51	Materials
<a href="#">SPR-168</a>	American Steel and Wire Company Alternate 3 – By 12-in. Mesh for Concrete Pavements	E. A. Finney	Jan-52	Pavement Design & Pavement Performance
<a href="#">SPR-169</a>	Investigation of Slippery Conditions on US-2 Stone Sand Concrete Pavement (Supplement No. 3 to Report No. 117)	E. A. Finney	Feb-52	Pavement Design & Pavement Performance
<a href="#">SPR-170</a>	Wallace Stone Investigation, Part I Scaling on Main Street Bridges, Lansing UB-1 and UB-2 of 33-6-4	E. A. Finney	Feb-52	Bridge & Special Structures Design
<a href="#">SPR-171</a>	The 1951 Proposed AASHTO Policy on Motor Vehicle Operation	L. D. Childs	Feb-52	Administration & Management
<a href="#">SPR-172</a>	Revision of Present Specifications Covering Adjustment of Catch-Basin Covers to Proper Elevation, to Permit Welding as Alternate to Brazing	E. A. Finney, B. W. Pocock	Feb-52	Materials
<a href="#">SPR-173</a>	Manual for Reflectometer Operation and Maintenance	C. C. Rhodes, B. W. Preston	Feb-52	Systems, Maintenance & Operations
<a href="#">SPR-174</a>	Mid-winter Inspection of Paper Snow Fence Installations, 1951-1952	E. A. Finney, W. C. Broughton	Mar-52	Materials
<a href="#">SPR-175</a>	Concrete Pavement Joint Saw-Cutting and Sealing Experiment, US-27	B. W. Pocock, Wm. Martin	Apr-52	Pavement Design & Pavement Performance
<a href="#">SPR-176</a>	Investigation of Klumpp Aggregates	C. C. Rhodes, M. G. Brown	Apr-52	Materials

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<a href="#">SPR-177</a>	1951 ASTM Cooperative Traffic Paint Tests	C. C. Rhodes	Jun-52	Materials
<a href="#">SPR-178</a>	Paper Snow Fence Installations, 1951-1952	W. C. Broughton	Jul-52	Materials
<a href="#">SPR-179</a>	Lincoln Stone as a Material for Bituminous Concrete Resurfacing	E. A. Finney, W. C. Broughton	Jul-52	Materials
<a href="#">SPR-180</a>	Foundry Slag as an Abrasive for Icy Pavements	B. W. Pocock	Aug-52	Materials
<a href="#">SPR-181</a>	Investigation of Prefabricated Plywood Wales for Concrete Column Construction	L. T. Gehler	Aug-52	Materials
<a href="#">SPR-182</a>	France Stone as a Material for Bituminous Concrete Resurfacing	E. A. Finney	Sep-52	Materials
<a href="#">SPR-183</a>	Failure of Expansion Joint Filler on John C. Lodge Expressway: Construction Project 82-127	E. A. Finney	Sep-52	Pavement Design & Pavement Performance
<a href="#">SPR-184</a>	Results of Skidding Tests on Stone Sand Concrete Pavements, Projects 77-66, C1 and 71-24, C1	E. A. Finney	Dec-52	Pavement Design & Pavement Performance
<a href="#">SPR-185</a>	Joint Failures on Construction Project 63-37, C4, M-59 Between US-24 and Auburn Heights	E. A. Finney	Dec-52	Pavement Design & Pavement Performance
<a href="#">SPR-186</a>	Condition Survey of Bituminous Concrete Projects Containing Wallace Stone	E. A. Finney	Dec-52	Pavement Design & Pavement Performance
<a href="#">SPR-187</a>	1952 Performance Tests of Traffic Paints	E. A. Finney, C. C. Rhodes	Dec-52	Materials
<a href="#">SPR-188</a>	1952 Performance Tests of Traffic Paints	E. A. Finney	Apr-53	Materials
<a href="#">SPR-189A</a>	Analysis of Proposed Research Projects involving Work with Radioactive Isotopes	B. W. Pocock	May-53	Systems, Maintenance & Operations
<a href="#">SPR-190</a>	Michigan Experiment in Snow and Ice Removal on Highways by Radiant Heat 1952 #5	E. A. Finney	Mar-53	Asset Management
<a href="#">SPR-191</a>	Wallace Stone Investigation Part III Comparative Laboratory Study of Wallace Limestone with the National Crushed Stone Association	M. G. Brown, E. A. Finney	Jun-53	Materials
<a href="#">SPR-192</a>	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat Report #6	E. A. Finney	Jul-53	Asset Management
<a href="#">SPR-193</a>	Report on Experiment with HP-7 Admixture, US-23 – Rogers City – 71-24, C1	W. C. Broughton	Aug-53	Pavement Design & Pavement Performance
<a href="#">SPR-194</a>	Experimental Concrete Capping on Groesbeck Highway, Project F 50-7, C5 – F-421 (1)	W. C. Broughton	Aug-53	Pavement Design & Pavement Performance
<a href="#">SPR-195</a>	Evaluation of Aggregate Sources	M. G. Brown	Sep-53	Materials
<a href="#">SPR-196</a>	Neoprene Premolded Joint Seal Installation, Project F 34-15, M-66	W. C. Broughton	Sep-53	Pavement Design & Pavement Performance

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<a href="#">SPR-197</a>	Experimental Contract Resealing of Joints and Cracks on US-16, Nunica to Fruitport Project Mc 70-28,C3	L. A. Fickes	Oct-53	Pavement Design & Pavement Performance
<a href="#">SPR-197A</a>	Experimental Patching of Broken Concrete at Expansion Joints – US-16, Nunica to Fruitport	L. A. Fickes	Dec-53	Pavement Design & Pavement Performance
<a href="#">SPR-197B</a>	A Condition Survey of Experimental Contract Resealing and Patching Project, US-16 Nunica to Fruitport	L. A. Fickes	Feb-54	Pavement Design & Pavement Performance
<a href="#">SPR-198</a>	Study of the Effectiveness of Hook Bolts for Use as Tie Bars for Longitudinal Joints	G. R. Cudney	Nov-53	Pavement Design & Pavement Performance
<a href="#">SPR-199</a>	Paper Snow Fence Installations 1952 – 1953	W. C. Broughton	Dec-53	Materials
<a href="#">SPR-200</a>	A Study of the Rigidity of Various Dowel Bar Assemblies	L. T. Oehler, G. R. Cudney, R. D. Behr	Dec-53	Materials
<a href="#">SPR-201</a>	Wallace Stone Investigation Part II, 1951 Condition Survey of Concrete Pavements and Bridges Containing Wallace Bayport Crushed Limestone Aggregates	R. S. Fulton, M. G. Brown, E. A. Finney	Dec-53	Materials
<a href="#">SPR-202</a>	Cracking Experience of Concrete Pavements Containing Slag Coarse Aggregate – Results of 1953 Survey	E. A. Finney, L. T. Oehler	Dec-53	Materials
<a href="#">SPR-203</a>	Special Study of Tie Wires For Snow Fence Construction	G. R. Cudney	Dec-53	Materials
<a href="#">SPR-204</a>	The Influence of Subsealing on Pavement Deflection At Two test Locations on US-24 & US-25	L. T. Oehler, R. D. Behr	Jan-54	Pavement Design & Pavement Performance
<a href="#">SPR-205</a>	Evaluation of Metal Primers and Wood Sealers	B. W. Preston	Feb-54	Materials
<a href="#">SPR-206</a>	Experimental Concrete Capping on Groesbeck; Joint Investigation Between Construction Division and Testing and Research Division with Approval of Bureau of Public Roads	MDOT	Apr-54	Pavement Design & Pavement Performance
<a href="#">SPR-207</a>	Condition Survey, US-2, Wakefield to Iron River, U.P.	Wm. Broughton, E. Bessonon, A. Smith	Apr-54	Pavement Design & Pavement Performance
<a href="#">SPR-208</a>	Concrete Spalling on Projects 7-20, C6 and 7-21, C2 on US-41 Upper Peninsula	E. A. Finney, M. G. Brown	Apr-54	Pavement Design & Pavement Performance
<a href="#">SPR-209</a>	A Study of the Relative Effectiveness of Methods for End Stiffening of Corrugated Metal Culverts	G. Cudney	May-54	Geotechnical & Foundation Design
<a href="#">SPR-210</a>	Neoprene Premolded Joint Seal Study Construction Project F 34-15, C4 on M-66 Progress Report No. 4	W. C. Broughton	Jul-54	Pavement Design & Pavement Performance
<a href="#">SPR-211</a>	Tensile Strength Characteristics of Hook Bolts Furnished by Jones & McKnight, Inc.	E. A. Finney	Jul-54	Materials
<a href="#">SPR-212</a>	Michigan's Experience in the Use of Pozzolith and HP-7 Admixtures for Concrete Pavement Construction	Research Laboratory	Jul-54	Pavement Design & Pavement Performance
<a href="#">SPR-213</a>	Experiment with Vinsol Resin and HP-7 Admixtures Under Cold Weather Concreting Conditions	E. A. Finney	Aug-54	Pavement Design & Pavement Performance
<a href="#">SPR-214</a>	New Impact Tester for Reflector Buttons	B. W. Preston	Aug-54	Asset Management

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<a href="#">SPR-215</a>	Experimental Capping Study, Construction Project F 33-54, C4 on US-127, Progress Report No. 1	Wm. Broughton	Dec-54	Pavement Design & Pavement Performance
<a href="#">SPR-216</a>	Application of Absorption Spectroscopy to Highway Testing and Research	C. Rhodes	Oct-54	Materials
<a href="#">SPR-217</a>	Measuring Traffic Paint Abrasion with Beta Rays	W. Pocock	Nov-54	Materials
<a href="#">SPR-218</a>	Experimental Resealing of Joints on M-83 Saginaw County, Projects 73-25, C3 & C4	L. A. Fickes	Jan-55	Pavement Design & Pavement Performance
<a href="#">SPR-219</a>	Vibration and Deflection of Rolled Beam and Plate Girder Type Bridges	G. Foster, L. T. Oehler	Jan-55	Bridge & Special Structures Design
<a href="#">SPR-220</a>	Performance of Hot-Poured Rubber-Asphalt Joint Sealing Compounds	L. A. Fickes	May-55	Pavement Design & Pavement Performance
<a href="#">SPR-221</a>	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat, 1953-54 Winter Performance and Cost, Report No. 7	E. A. Finney	Jan-55	Asset Management
<i>SPR-222</i>	<i>Survey of Skid Resistance of Michigan State Highway Surfaces – CONFIDENTIAL – Not Available</i>	<i>E. A. Finney, General Motors Proving Ground</i>	<i>Dec-54</i>	<i>Not Available</i>
<a href="#">SPR-223</a>	A Study of Pavement Deflections on Faulted and Cracked Pavement Slabs on US-24A, South of Erie	L. T. Oehler	Feb-55	Pavement Design & Pavement Performance
<a href="#">SPR-224</a>	A Comparison of the Bond-Reducing Effectiveness of Cutback Asphalt with that of a Powdered Graphite Lubricant as Dowel Bar Coatings	G. R. Cudney	Apr-55	Pavement Design & Pavement Performance
<a href="#">SPR-225</a>	Second Condition Survey of Experimental Contract Resealing and Patching Project, US-16, Nunica to Fruitport, Project MC 70-28, C3	L. A. Fickes	Mar-55	Pavement Design & Pavement Performance
<a href="#">SPR-226</a>	Experimental Cold-Applied Joint Seal Installation on US-31, Holland By-Pass Project FI 3-38, C2R; FI 70-46, C2R	L. A. Fickes	May-55	Pavement Design & Pavement Performance
<a href="#">SPR-227</a>	ASTM 1954 Cooperative Traffic Paint Tests	C. C. Rhodes, B. W. Pocock	Jun-55	Materials
<a href="#">SPR-228</a>	Experimental Resealing of Joints on M-83 Saginaw County, Projects 73-25, C3 & 4, First Condition Survey	L. A. Fickes	Apr-55	Pavement Design & Pavement Performance
<a href="#">SPR-229</a>	Investigation of the Influence of Soil Particles Passing the Number 200 Sieve (0.074 mm.) On the Stabilization of Gravel	R. J. Leonard	Jun-55	Environmental
<a href="#">SPR-230</a>	Evaluation of the Lateral Stability of Posts for Deep Beam Guard Rail	G. R. Cudney	Jun-55	Materials
<a href="#">SPR-231</a>	Study of Premolded Rubber Base Plate for Joints	L. A. Fickes	Jun-55	Pavement Design & Pavement Performance
<a href="#">SPR-232</a>	Static Load Deflection Tests on Various Types of Deep Beam Guard Rails	G. R. Cudney	Jul-55	Materials
<a href="#">SPR-233</a>	Determination of the Modulus of Concrete Support, G, for the Design of Dowels in Transverse Pavement Joints	G. R. Cudney, R. D. Behr	Jul-55	Pavement Design & Pavement Performance
<a href="#">SPR-234</a>	Investigation of Bichler Brothers Gravel	M. G. Brown	Jul-55	Materials

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<a href="#">SPR-235</a>	Compilation of Design and Construction Data for Concrete Pavement on the State Trunkline System	MDOT	Oct-55	Pavement Design & Pavement Performance
<a href="#">SPR-236</a>	A Comparison of Beaded Paint and Sheet Reflectorized Stop Signs (Red)	B. W. Preston	Oct-55	Materials
<a href="#">SPR-237</a>	A Study of the Rigidity of the Union Steel Products Dowel Bar Joint Assembly	E. A. Finney	Aug-55	Pavement Design & Pavement Performance
<a href="#">SPR-238</a>	Experimental Installation of Styrofoam and Corrugated Paper Board to Form a Contraction Joint Groove Prior to Sawing	L. A. Fickes	Sep-55	Pavement Design & Pavement Performance
<a href="#">SPR-239</a>	Experimental Resealing of Joints on M-83 Saginaw County Projects 73-25, C3 & C4, Second Condition Survey	L. A. Fickes	Oct-55	Pavement Design & Pavement Performance
<a href="#">SPR-239A</a>	Investigation of Blow-up on M-47 Construction Project 73-46, C4 South of St. Charles	E. A. Finney	Oct-55	Pavement Design & Pavement Performance
<a href="#">SPR-240</a>	Procuring Traffic Paint on the Basis of Performance Tests	C. C. Rhodes	Nov-55	Materials
<a href="#">SPR-241</a>	1954 Performance Tests on Traffic Paints	C. C. Rhodes	Nov-55	Materials
<a href="#">SPR-242</a>	Abstracts from Michigan's Studies of Slipperiness of Concrete Pavements Constructed with Stone Sand as the Fine Aggregate	E. A. Finney	Oct-55	Materials
<a href="#">SPR-243</a>	Michigan State Highway Department Photometric Test for Reflective Materials	B. W. Preston	Dec-55	Asset Management
<a href="#">SPR-244</a>	The Structural Characteristics of Two Overhead Sign Supports (a 100 Foot Steel Tubular Beam and a 100 Foot Aluminum Truss)	G. R. Cudney, L. T. Oehler	Dec-55	Bridge & Special Structures Design
<a href="#">SPR-245</a>	Traffic Paints and Their Use in Pavement Marking	C. C. Rhodes	Dec-55	Materials
<a href="#">SPR-246</a>	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat, Eighth Progress Report	E. A. Finney	Jan-56	Asset Management
<a href="#">SPR-247</a>	Performance Tests on Experimental Black Traffic Paints, First Progress Report	A. J. Permoda, W. Martin	Oct-56	Materials
<a href="#">SPR-248</a>	Performance of Hot-Pour Rubber-Asphalt Joint Sealing Compounds in 50-ft. Spaced Joints	L. A. Fickes	Feb-56	Pavement Design & Pavement Performance
<a href="#">SPR-249</a>	Data Summaries on Nuclear Methods Reported on Soils	B. W. Pocock	Dec-55	Systems, Maintenance & Operations
<a href="#">SPR-250</a>	A Comparison of a Vinyl Coating System With a Red Lead – Brown Lead – Aluminum Coating System for Bridges	B. W. Preston	Jan-56	Bridge & Special Structures Design
<a href="#">SPR-251</a>	Measurement of the Linear Coefficient of Thermal Expansion of Pavement Marking Paint and a Mathematical Consideration of the Phenomenon of Paint Peeling	W. Sommerman	Jan-56	Materials
<a href="#">SPR-252</a>	Application of A Beta-Ray Backscatter Thickness Gage to Traffic Paint Wear Studies	B. W. Pocock	Jan-56	Materials
<a href="#">SPR-253</a>	Supplemental Progress Report on Experimental Slag Bituminous Concrete Project (M82-42, C2 & C3)	P. Milliman	Feb-56	Pavement Design & Pavement Performance

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<a href="#">SPR-254</a>	Performance of Hot-Pour and Cold – Applied Joint Seal Materials, US-127 Relocation South of Jackson	L. A. Fickes	Feb-56	Pavement Design & Pavement Performance
<a href="#">SPR-255</a>	Road Surface Friction From the Standpoint of Automotive and Highway Engineers	P. C. Skeels, K. A. Stonex, E. A. Finney	Feb-56	Pavement Design & Pavement Performance
<a href="#">SPR-256</a>	A Theory for Evaluating the Destructive Tendency of Heavy Axle Loads on a Concrete Pavement	L. T. Oehler, R. D. Behr	Mar-56	Pavement Design & Pavement Performance
<a href="#">SPR-257</a>	Third Condition Survey of Experimental Contract Resealing and patching, US-16, Nunica to Fruitport	L. A. Fickes	Apr-56	Pavement Design & Pavement Performance
<a href="#">SPR-258</a>	The Experimental Determination of the Stress Distribution Along a Dowel at a Transverse Joint in a Concrete Pavement	P. Milliman, R. D. Behr	May-56	Pavement Design & Pavement Performance
<a href="#">SPR-259</a>	Rigidity Tests on LaClede Dowel Bar Joint Assembly	L. T. Oehler	Jun-56	Pavement Design & Pavement Performance
<a href="#">SPR-260</a>	Protective Coatings for Structural Steel	A. J. Permoda, W. Martin	Jul-56	Materials
<a href="#">SPR-261</a>	An Analysis of Certain Mathematical Assumptions Underlying the Design and Operation of Gamma-Ray Surface Density Gages	B. W. Pocock	Jul-56	Materials
<a href="#">SPR-262</a>	Flame Photometric Determination of Sodium, Potassium, Magnesium and Iron Oxides in Portland Cements	P. Biefeld	Jul-56	Materials
<a href="#">SPR-263</a>	Metcoseal: A Protective Coating for Structural Steel	A. J. Permoda, W. Martin	Aug-56	Materials
<a href="#">SPR-264</a>	Investigation of Bridge Deck Deterioration: 81-1-13 on US-23 Over the Huron River	L. T. Oehler, M. G. Brown	Sep-56	Bridge & Special Structures Design
<a href="#">SPR-265</a>	Load Deflection and Tensile Tests on Standard Type Steel Beam Guard Rail	G. R. Cudney	Oct-56	Materials
<a href="#">SPR-266</a>	Cracking of Slag Aggregate Concrete on Gratiot Avenue, Detroit	E. A. Finney	Oct-56	Materials
<a href="#">SPR-267</a>	1956 Performance Tests on White and Yellow Traffic Paint, First Progress Report	A. J. Permoda, Wm. Martin, M. H. Janson	Oct-56	Materials
<a href="#">SPR-268</a>	A Field Study of Joint and Crack Resealing Methods and Materials	L. A. Fickes, C. C. Rhodes	Nov-56	Pavement Design & Pavement Performance
<a href="#">SPR-269</a>	1956 Traffic Paint Striping on US-25, Gratiot Avenue, Detroit	A. J. Permoda	Nov-56	Materials
<a href="#">SPR-270</a>	1955 Performance Tests on White and Yellow Traffic Paint	A. J. Permoda, Wm. Martin	Nov-56	Materials
<a href="#">SPR-271</a>	A Comparative Study of the Drop-In and Overlay Methods of Reflectorizing Traffic Paints	C. C. Rhodes	Nov-56	Materials
<a href="#">SPR-272</a>	Vibration Susceptibilities of Various Highway Bridge Types	L. O. Oehler	Jan-57	Bridge & Special Structures Design
<a href="#">SPR-273</a>	Investigation of Perma-line Thermoplastic Pavement Marking Material	A. J. Permoda	Feb-57	Materials

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<a href="#">SPR-274</a>	Color Patterns for Flagmen's Vests	C. C. Rhodes, M. H. Janson, D. F. Simmons, P. D. Cook	Feb-57	Asset Management
<a href="#">SPR-275</a>	Subgrade Embankment Soil: AASHTO Road Test	L. W. Smith	Mar-57	Roadway Design
<a href="#">SPR-276</a>	A Study of the Rigidity of American Steel and Wire Co. Contraction Joint Assembly	G. R. Cudney, L. T. Oehler	Mar-57	Pavement Design & Pavement Performance
<a href="#">SPR-277</a>	ASTM 1956 Cooperative Traffic Paint Tests	A. J. Permoda, Wm. Martin	Mar-57	Materials
<a href="#">SPR-278</a>	Michigan's Experiment in Snow and Ice Removal by Radiant Heat, Ninth (Final) Progress Report	E. A. Finney	Apr-57	Asset Management
<a href="#">SPR-279</a>	Aluminum Right-of-Way Fence	E. A. Finney, C. C. Rhodes	Jul-57	Materials
<a href="#">SPR-280</a>	Rusting of Steel Beam Guard Rail on Ford and Lodge Expressways	A. J. Permoda	Aug-57	Materials
<a href="#">SPR-281</a>	1956 Performance Tests on White and Yellow Traffic Paint, Second Progress Report	A. J. Permoda, Wm. Martin, M. H. Janson	Oct-57	Materials
<a href="#">SPR-282</a>	1957 Performance Tests on White and Yellow Traffic Paint, First Progress Report	A. J. Permoda, Wm. Martin, M. H. Janson	Nov-57	Materials
<a href="#">SPR-283</a>	Michigan's Skid Testing Program	M. G. Brown, E. A. Finney	Jan-58	Pavement Design & Pavement Performance
<a href="#">SPR-284</a>	Determination of Sodium, Potassium, Magnesium, and Iron Oxides in Portland Cement by Flame Photometry	P. F. Biefeld, C. C. Rhodes	Mar-58	Materials
<a href="#">SPR-285</a>	Characteristics and Quantitative Estimation of Waxy Materials in Membrane Curing Compounds	M. H. Janson	Mar-58	Materials
<a href="#">SPR-286</a>	1956 Performance Tests on Free-Flowing Glass Beads	A. J. Permoda, Wm. Martin, M. H. Janson	Mar-58	Materials
<a href="#">SPR-287</a>	Rigidity Tests on Union Steel Products Co. Dowel Bar Joint Assembly (Type L.)	L. T. Oehler	Apr-58	Pavement Design & Pavement Performance
<a href="#">SPR-288</a>	Study of Premolded Bituminous Base Plate for Joints	L. A. Fickes	Apr-58	Pavement Design & Pavement Performance
<a href="#">SPR-289</a>	Rigidity Tests on Universal Form Clamp Co. Dowel Bar Joint Assembly (Type M)	L. T. Oehler	May-58	Pavement Design & Pavement Performance
<a href="#">SPR-290</a>	Investigation of Use of Berylex as an Admixture in Concrete	M. G. Brown	Apr-58	Materials
<a href="#">SPR-291</a>	Power-Glo Additive for Automobile Use	A. J. Permoda, M. H. Janson	Apr-58	Materials
<a href="#">SPR-292</a>	Reflectance Tests for Concrete Curing Materials	C. C. Rhodes, M. H. Janson, M. G. Brown	May-58	Pavement Design & Pavement Performance
<a href="#">SPR-293</a>	The Structural Characteristics of a Plastic Fiberglass Overhead Sign Support Structure	G. R. Cudney	Jun-58	Materials



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<a href="#">SPR-294</a>	Michigan's Skid Testing Equipment	M. G. Brown, Paul Milliman, Gale Otto	Sep-58	Pavement Design & Pavement Performance
<a href="#">SPR-295</a>	Relative Skid Resistance of Pavement Surfaces Based on Michigan's Experience	E. A. Finney, M. G. Brown	Aug-58	Pavement Design & Pavement Performance
<a href="#">SPR-296</a>	Progress Report on Study of Dynamic Load Aspects of Truck Size and Weight	E. A. Finney	Nov-58	Commercial Vehicle Enforcement
<a href="#">SPR-297</a>	Operating Manual for Soil Density and Moisture Measurements by Nuclear Methods	B.W. Pocock, L. W. Smith, W. H. Schwartzje	Sep-58	Systems, Maintenance & Operations
<a href="#">SPR-298</a>	1957 Performance Tests on White and Yellow Traffic Paint	A. J. Permoda, Wm. Martin, M. H. Janson	Nov-58	Materials
<a href="#">SPR-299</a>	1957 Traffic Paint Performance Test: Oakland Avenue, Detroit	A. J. Permoda, Wm. Martin, M. H. Janson	Nov-58	Materials
<a href="#">SPR-300</a>	Determination of Cement Content of Pavement Concrete: Construction Project F 62031, C2U, C3R	C. C. Rhodes, M. H. Janson, W. L. Frederick, C. W. Buie	Nov-58	Pavement Design & Pavement Performance
<a href="#">SPR-301</a>	1958 Performance Tests on White and Yellow Traffic Paints	A. J. Permoda, Wm. Martin, M. H. Janson	Dec-58	Materials
<a href="#">SPR-302</a>	Final Report—Design Project, Michigan Test Road	E. A. Finney, L. T. Oehler	Jan-59	Roadway Design
<a href="#">SPR-303</a>	Comparison of Stability of Three Types of Steel Fence Post	S. L. DeLeeuw, G. R. Cudney	Jan-59	Materials
<a href="#">SPR-304</a>	Field Evaluation of Concrete Curing Materials	M. G. Brown	Jan-59	Pavement Design & Pavement Performance
<a href="#">SPR-305</a>	Spectrophotometric Identification of Membrane Curing Compounds	M. H. Janson	Feb-59	Materials
<a href="#">SPR-306</a>	Performance of a 20-Year-Old Section of US-27: Marshall to the Eaton County Line (13072)	R. C. Mainfort, O. L. Lindy	Mar-59	Pavement Design & Pavement Performance
<a href="#">SPR-307</a>	A Device for Applying SR-4 Strain Gages to Interior Surfaces of Hollow, Pavement Load-Transfer Dowel Bars	P. Milliman	Dec-59	Materials
<a href="#">SPR-308</a>	Operating Manual for Soil Density and Moisture Measurements by Nuclear Methods	B. W. Pocock, L. W. Smith, W. H. Schwartzje	Mar-59	Systems, Maintenance & Operations
<a href="#">SPR-309</a>	Rock Salt Anti-Caking Agent Investigation	W. Frederick	Mar-59	Materials
<a href="#">SPR-310</a>	An Evaluation of the Serviceability of Calcium Chloride Bags	R. C. Mainfort	Mar-59	Materials
<a href="#">SPR-311</a>	The Michigan Combination Density-Moisture Gage for Soils	B. W. Pocock, L. W. Smith, W. H. Schwartzje, P. F. Hooper	Mar-59	Environmental
<a href="#">SPR-312</a>	Catatherm Thermoplastic Striping	A. J. Permoda, Wm. Martin, M. H. Janson	Apr-59	Materials
<a href="#">SPR-313</a>	Testing of Aluminum Alloy Deep Beam Guard Rail	G. R. Cudney, R. E. Hooper	May-59	Materials



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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-314</a>	An Experimental Continuously Reinforced Concrete Pavement in Michigan	G. R. Cudney	Dec-59	Pavement Design & Pavement Performance
<a href="#">SPR-315</a>	Pull-Out Tests on Four Types of Expansion Sleeve Tie Bar Devices	R. E. Hooper, G. R. Cudney	Sep-59	Materials
<a href="#">SPR-316</a>	The Michigan Nuclear Combination Density-Moisture Surface Gage	B. W. POCOCK, L. W. Smith, W. H. Schwartzje, P. F. Hanna	Sep-59	Systems, Maintenance & Operations
<i>SPR-317</i>	<i>Highway Research Program – No Report</i>	<i>E. A. Finney, W. D. Bennett</i>	<i>Sep-59</i>	<i>Not Available</i>
<a href="#">SPR-318</a>	1958 Performance Tests on White and Yellow Traffic Paints	A. J. Permoda, Wm. Martin, M. H. Janson	Oct-59	Materials
<a href="#">SPR-319</a>	1959 Road Test on 1,000 Gallons of 3M Centerlite Prebeaded White Traffic Paint	A. J. Permoda	Dec-59	Materials
<a href="#">SPR-320</a>	Summary Report on Methods of Glass Bead Reflectorization of Traffic Paints	A. J. Permoda	Dec-59	Materials
<a href="#">SPR-321</a>	Latex Modified Mortar in the Restoration of Bridge Structures	S. M. Cardone, M. G. Brown, A. A. Hill	Dec-59	Bridge & Special Structures Design
<a href="#">SPR-322</a>	The Michigan Test Road Durability Project	C. C. Rhodes, E. A. Finney	Jan-60	Roadway Design
<i>SPR-323</i>	<i>No Report</i>			
<a href="#">SPR-324</a>	1959 Summaries of Pavement Roughness	O. L. Lindy, P. Milliman	Mar-61	Pavement Design & Pavement Performance
<a href="#">SPR-325</a>	Roughness Measurements of Bridge Decks and Approaches	R. E. Hooper, L. T. Oehler	Mar-60	Bridge & Special Structures Design
<a href="#">SPR-326A</a>	Contract Signing, Interstate 94 (US-12), 5 mi East from Paw Paw; BI 80024, C2RN & C5RN; I 94-2(5)-60	M. H. Janson	May-60	Bridge & Special Structures Design
<a href="#">SPR-327</a>	Transverse Joint Problems	E. A. Finney	Apr-60	Pavement Design & Pavement Performance
<a href="#">SPR-328</a>	Comparative Tests of Beaded Paint and Sheet Materials for Sign Reflectorization	C. C. Rhodes, A. J. Permoda, M. H. Janson	May-60	Materials
<a href="#">SPR-329</a>	Design Considerations for Steel Reinforcement in Continuously Reinforced Pavement	G. R. Cudney	Apr-60	Pavement Design & Pavement Performance
<a href="#">SPR-330</a>	Design Considerations for Reinforcement and Joint Spacing for Pavements with Small-Radius Curves	G. R. Cudney	May-60	Pavement Design & Pavement Performance
<a href="#">SPR-331</a>	Experimental Concrete Capping on Groesbeck Highway: Project F50-7, C5. Third Progress Report	O. L. Lindy	May-60	Pavement Design & Pavement Performance
<a href="#">SPR-332</a>	Deterioration of Concrete Highways and Bridges Containing Big Cut Pit Aggregates	O. L. Lindy, M. G. Brown	Jun-60	Bridge & Special Structures Design
<a href="#">SPR-333</a>	The Relative Effects of Commercial Vehicles on Concrete Pavements	L. T. Oehler, P. Millman	Aug-60	Pavement Design & Pavement Performance

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<a href="#">SPR-334</a>	Study of Premolded Rubber and Polyvinyl Chloride Base Plate for Joints	D. F. Simmons, C. C. Rhodes	Jun-60	Pavement Design & Pavement Performance
<a href="#">SPR-335</a>	Cement Content of Pavement Concrete: US-12 South of Paw Paw; BI 80024, C2RN	C. C. Rhodes, M. G. Brown	Jun-60	Pavement Design & Pavement Performance
<a href="#">SPR-336</a>	Flasher Brightness at Selected Intersections	M. H Janson, G. M. Smith	Jun-60	Transportation Safety
<a href="#">SPR-337</a>	Roughness Evaluation of Railroad Crossings in Battle Creek	R. Hooper	Jul-60	Multi-Modal
<a href="#">SPR-338</a>	Granco Steel Guard Rail Post (6-1/2 x 3-1/2 x 8.64 "S" Section)	G. R. Cudney	Jul-60	Materials
<a href="#">SPR-339</a>	Quantity and Distribution of Calcium Chloride Within Stock-Piles of Treated Aggregate	R. C. Mainfort, F. Copple	Aug-60	Materials
<a href="#">SPR-340</a>	1959 Traffic Paint Performance Tests: Cooperative Tests with City of Detroit	A. J. Permoda	Aug-60	Materials
<a href="#">SPR-341</a>	Inspection of Fiberglass Reinforced Plastic Overhead Sign Support Structure	G. R. Cudney	Aug-60	Bridge & Special Structures Design
<a href="#">SPR-342</a>	Lateral Stability of Posts for Deep Beam Guard Rail: Second Progress Report	G. R. Cudney	Sep-60	Materials
<a href="#">SPR-343</a>	Performance of Metallic and Non-Metallic Base Plates of Joints	O. L. Lindy, L. T. Oehler	Sep-60	Pavement Design & Pavement Performance
<a href="#">SPR-344</a>	An Evaluation of Hinged Wire Mesh Reinforcement for Concrete Pavement	R. Hooper	Sep-60	Pavement Design & Pavement Performance
<a href="#">SPR-345</a>	Storage and Handling Properties of a Synthetically Granulated Salt	R. C. Mainfort, J. D. Shackelford	Sep-60	Materials
<a href="#">SPR-346</a>	Water Leakage on a Prestressed Concrete Bridge (B9 of 38-1-14 Dettman Road over US-12, Jackson)	O. Lindy, L. T. Oehler	Nov-60	Bridge & Special Structures Design
<a href="#">SPR-347</a>	Comparison of Clear and White Polyethylene Sheets for Concrete Curing	R. H. Merrill, M. G. Brown	Oct-60	Bridge & Special Structures Design
<a href="#">SPR-348</a>	1959 Performance Tests on White And Yellow Traffic Paints	A. J. Permoda, M. H. Janson, Wm. Martin	Oct-60	Materials
<a href="#">SPR-349</a>	Performance of Non-Metallic Base Plates, Fourth Progress Report	L. T. Oehler, O. L. Lindy	Nov-60	Pavement Design & Pavement Performance
<a href="#">SPR-350</a>	Investigation of Three Spalled Joints, Norton-Glade Expressway, Muskegon, US-16 (Project 61-47.C7)	L. T. Oehler, O. L. Lindy	Feb-61	Pavement Design & Pavement Performance
<a href="#">SPR-351</a>	Durability of Bridge Concrete: I 75-US-23 Over the Flint River (B1 of 25-7-3)	L. T. Oehler, M. G. Brown	Mar-61	Bridge & Special Structures Design
<a href="#">SPR-352</a>	Lightning Damage to Concrete Pavement: US-10 Bypass, Midland (Project 56044, C9)	O. L. Lindy, J. R. Darlington	Mar-61	Pavement Design & Pavement Performance
<a href="#">SPR-353</a>	Experimental Concrete Capping: US-127 South of Holt (Project F 33-54, C4) Second Progress Report	O. L. Lindy	Apr-61	Pavement Design & Pavement Performance

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<a href="#">SPR-354</a>	Investigation of Thorite Filling and Patching Compound for Sealing Core Holes In Box Type Prestressed Beams	M. G. Brown	Dec-60	Materials
<a href="#">SPR-355</a>	Longitudinal Cracking on I-75 – US-23, Genesee County	O. L. Lindy	May-61	Pavement Design & Pavement Performance
<a href="#">SPR-356</a>	Cracking of Slag Aggregate concrete on Gratiot Avenue, Detroit (Project 50-27, C4)	L. T. Oehler	Mar-61	Materials
<i>SPR-357</i>	<i>Summary of Pavement Skid Test Data on the State Trunkline System – No Report</i>	<i>M. G. Brown</i>	<i>Mar-61</i>	<i>Not Available</i>
<a href="#">SPR-358</a>	Field and Laboratory Evaluation of the Michigan Nuclear Gage	R. C. Mainfort, J. H. DeFoe	Aug-61	Systems, Maintenance & Operations
<a href="#">SPR-359</a>	Investigation of Three Spalled Joints on US-131 South of Grand Rapids (Construction Projects F 41-88, C1RO and M 41-88)	O. L. Lindy	Jun-61	Pavement Design & Pavement Performance
<a href="#">SPR-360</a>	Strength Comparison of Steel Sign Posts	H. C. Brunke	Jun-61	Materials
<a href="#">SPR-361</a>	Protective Coatings for Structural Steel, Second Progress Report	A. J. Permoda, R. L. Snider	Sep-61	Materials
<a href="#">SPR-362</a>	Summary Report on Skid-Correction Program for High-Accident Intersections	R. H. Merrill, A. Phillipich	Jul-61	Pavement Design & Pavement Performance
<a href="#">SPR-363</a>	Performance of a Fiberglass Reinforced Plastic Experimental Overhead Sign Support Structure	G. R. Cudney	Sep-61	Bridge & Special Structures Design
<a href="#">SPR-364</a>	Preventive Measures for Obtaining Scale-Free Concrete Bridge Structures	E. A. Finney	Dec-61	Bridge & Special Structures Design
<a href="#">SPR-365</a>	Continuously Reinforced Bituminous Resurfacing, Detroit Industrial Expressway (I-94), West of Ypsilanti	O. L. Lindy	Jan-62	Pavement Design & Pavement Performance
<a href="#">SPR-366</a>	1960 Summary of Pavement Roughness	O. L. Lindy, P. Milliman	Nov-61	Pavement Design & Pavement Performance
<a href="#">SPR-367</a>	Aggregate Source and Popout Frequency, I-94 from Marshall to Jackson	O. L. Lindy	Nov-61	Materials
<a href="#">SPR-368</a>	Michigan's Test Road for Transverse Joints, I-96 from Meridian Road to Wallace Road	L. T. Oehler	Nov-61	Roadway Design
<a href="#">SPR-369</a>	1960 Performance Tests on White and Yellow Traffic Paints	A. J. Permoda, R. L. Snider, M. H. Janson	Nov-61	Materials
<a href="#">SPR-370</a>	A Symposium on the Michigan Nuclear Gage for Soils	B. W. Pocock, R. E. Hanna, W. H. Schwartzje,	Oct-62	Systems, Maintenance & Operations
<a href="#">SPR-371</a>	Performance Testing of a 60-Foot, Open Web Section, Box Truss Aluminum Overhead Sign Support Structure	G. R. Cudney	Mar-62	Bridge & Special Structures Design
<a href="#">SPR-372</a>	Failure of Stressed Concrete Bridge Deck Beams (X01 of 11016), I-94 over NYCRR	G. R. Cudney	Feb-62	Bridge & Special Structures Design
<a href="#">SPR-373</a>	Machine Finishing of Bridge B01 of 11016: I-94 over the St. Joseph River	G. R. Cudney	Mar-62	Bridge & Special Structures Design

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<a href="#">SPR-374</a>	Cracks in Retaining Wall on James Couzens Extension of Lodge Expressway	G. R. Cudney	Feb-62	Bridge & Special Structures Design
<a href="#">SPR-375</a>	Comparison of Stone Dust and Natural Soil Particles as Used for the Fines Fraction of Aggregate Base Course Mixtures, First Progress Report	R. C. Mainfort, E. C. Novak	Mar-62	Materials
<a href="#">SPR-376</a>	Lenz's Proprietary Paints for Creosoted Wood Posts and for Structural Steel	A. J. Permoda	Mar-62	Materials
<a href="#">SPR-377</a>	Influence of the Minus 200 Fraction on Engineering Properties of Soil and Gravel	R. C. Mainfort, J. M. Portigo	May-62	Environmental
<a href="#">SPR-378</a>	Inspection of Mixer Efficiencies at Central Concrete Mixing Plants by Means of Gamma Rays	<i>B. W. POCOCK, W. H. Schwartje, C. A. Zapata, R. F. Hanson</i>	Feb-63	Materials
<a href="#">SPR-379</a>	Propane-Fueled Warning Lights	M. H. Janson, G. M. Smith	Apr-62	Materials
<a href="#">SPR-380</a>	Rustake Glare-Proof Fencing	B. W. Pocock	Apr-62	Materials
<a href="#">SPR-381R</a>	Evaluation of Armor Speed Finish and Gun-Tex as Protective Coatings for Concrete Structures	C. C. Rhodes, B. W. Pocock	Apr-63	Pavement Design & Pavement Performance
<a href="#">SPR-382</a>	Woven Asbestos Sheet Packing for Bridge Post Pads	L. T. Oehler, H. C. Brunke	Apr-62	Bridge & Special Structures Design
<a href="#">SPR-383</a>	Analysis of Test Cores from S04 of 82062, Scotten Avenue over US-12 (Michigan Avenue) Detroit	A. J. Permoda, M. G. Brown	Apr-62	Pavement Design & Pavement Performance
<a href="#">SPR-384</a>	Condition and Roughness Surveys on I-75 – US-233 Zilwaukee North to Kawkawlin	L. T. Oehler, O. L. Lindy	May-62	Pavement Design & Pavement Performance
<a href="#">SPR-385</a>	Investigation of Low Test Strength on Concrete from Project EBI 17034, C1UN	M. G. Brown	May-62	Pavement Design & Pavement Performance
<a href="#">SPR-386</a>	Reinforced Polyethylene Sheeting for Curing Concrete (Griffolyn Co. Films)	A. J. Permoda	Jun-62	Pavement Design & Pavement Performance
<a href="#">SPR-387</a>	Evaluation of Initial Striping on Concrete Pavements, 1960 Tests	A. J. Permoda	Jun-62	Pavement Design & Pavement Performance
<a href="#">SPR-388</a>	Effects of Erroneous Admixture in Bridge Deck Concrete: S06 of 23152B (I-96 at Millett Road)	M. G. Brown	Jun-62	Bridge & Special Structures Design
<a href="#">SPR-389</a>	Quantity and Distribution of Chloride in Aggregate as Placed in the Stockpile and on the Road	E. C. Novak, Jr., R. C. Mainfort	Jul-62	Materials
<a href="#">SPR-390</a>	Effects of Axle Loads as Applied by Rubber-Tired Earth-Moving Equipment to Rigid and Flexible Pavement and Bridges	F. Copple	Jul-64	Bridge & Special Structures Design
<a href="#">SPR-391</a>	Evaluation of a Hinged Wire Mesh Reinforcement for Concrete Pavements	H. C. Brunke	Oct-62	Pavement Design & Pavement Performance
<a href="#">SPR-392</a>	Comparison of Sodium Chloride and a 3:1 Mixture of Sodium Chloride and Calcium Chloride as Used for Highway Ice Control	J. H. DeFoe, R. C. Mainfort	Aug-62	Materials
<a href="#">SPR-393</a>	Aluminum Chain Link Fencing	C. C. Rhodes	Jun-62	Materials

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<a href="#">SPR-394</a>	Houghton-Hancock Lift Bridge Deck Leakage (B01 of 31012)	M. G. Brown	Aug-62	Bridge & Special Structures Design
<a href="#">SPR-395</a>	Summaries of Michigan Pavement Roughness 1961 Test Program	P. M. Schafer, L. F. Holbrook	Dec-62	Pavement Design & Pavement Performance
<a href="#">SPR-396R</a>	Aggregate Source and Popout Frequency, I-94 from Stevensville to Marshall	O. L. Lindy, J. W. Sparbel	Feb-63	Materials
<a href="#">SPR-397</a>	Failures of Continuously Reinforced Pavement, I-96, Portland Road to M-66	J. E. Simonsen	Dec-62	Pavement Design & Pavement Performance
<a href="#">SPR-398</a>	Premolded Rubber and Polyvinyl Chloride Base Plates	E. A. Finney	Oct-62	Materials
<a href="#">SPR-399</a>	1961 Performance Tests of White and Yellow Traffic Paints	A. J. Permoda, R. L. Snider, M. H. Janson	Nov-62	Materials
<a href="#">SPR-400</a>	Preservative Treatments for Timber Piling, First Progress Report	B. W. Pocock	Nov-62	Materials
<a href="#">SPR-401</a>	"Compriband" Preformed Urethane Joint Sealer	A. J. Permoda, D. F. Simmons	Nov-62	Pavement Design & Pavement Performance
<a href="#">SPR-402</a>	Curb and Median Joint Sealing to Correct Deck Leakage: Houghton-Hancock Life Bridge (B01 of 31012)	R. H. Merrill	Nov-62	Pavement Design & Pavement Performance
<a href="#">SPR-403</a>	Strength Comparison of Steel Sign Posts	H. C. Brunke	Dec-62	Materials
<a href="#">SPR-404</a>	Laboratory and Field Study of Right-of-Way Fence Wire Splices	H. C. Brunke	Jan-63	Materials
<a href="#">SPR-405</a>	Placement of Steel: I-75 North of St. Ignace (Project No. BI 49025E, C18)	C. J. Arnold	Dec-62	Pavement Design & Pavement Performance
<a href="#">SPR-406</a>	Chemical Analysis of Cover Plate Material from Bridges S09 and S10 of 82022 (I-94 over Ecorse Road)	C. J. Arnold	Dec-62	Bridge & Special Structures Design
<a href="#">SPR-407</a>	Trenching for Expansion Joints	C. J. Arnold	Dec-62	Pavement Design & Pavement Performance
<a href="#">SPR-408R</a>	Condition of the Stockbridge Soil-Cement Project after 21 Years of Service (Construction Project M 33-50, C1)	R. C. Mainfort	Jan-63	Pavement Design & Pavement Performance
<a href="#">SPR-409</a>	Repair of Continuously Reinforced Pavement I-96 Portland Road to M-66	J. E. Simonsen	Jan-63	Pavement Design & Pavement Performance
<a href="#">SPR-410</a>	1962 Observations on Condition of Experimental Poz-O-Pac Construction (Construction Projects BU 56044, C3UN and C4UN)	R. C. Mainfort	Jan-63	Construction
<a href="#">SPR-411</a>	Defective Concrete in Bridge Deck Pour: I-94 over US-131 Southwest of Kalamazoo (BI S07 of 39024B, C1)	M. G. Brown, W. L. Frederick	Jan-63	Bridge & Special Structures Design
<a href="#">SPR-412</a>	Development of a Rapid Field Method for Determining Optimum Moisture and Maximum Density of Soils	R. C. Mainfort, J. H. DeFoe	Feb-63	Environmental
<a href="#">SPR-413</a>	Air Pollutants from Gypsum Plants at the I-96 Grand River Bridge (B03 of 41029E, C1)	M. H. Janson, A. J. Permoda	Feb-63	Environmental

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<a href="#">SPR-414R</a>	Practical Bridge Loading Limitations in Relation to Current Commercial Vehicle Types and Bridge Design Practice	L. T. Oehler, P. G. Gray	May-63	Bridge & Special Structures Design
<a href="#">SPR-415R</a>	Experimental Shoulder Stabilization: US-23 North of Alpena (MN 04032, C6) First Progress Report	E. C. Novak, Jr., R. C. Mainfort	May-63	Geotechnical & Foundation Design
<a href="#">SPR-416</a>	Lime Treatment of Ontonagon Clay: I-75 at Pine River (Construction Project BI 49025G, C22RN)	R. C. Mainfort, E. C. Novak, Jr.	Mar-63	Materials
<a href="#">SPR-417R</a>	Form Insulation for Bridge Concrete	C. A. Zapata, G. A. Otto	Dec-63	Bridge & Special Structures Design
<a href="#">SPR-418</a>	Skid Test Results at High-Accident Intersections: Districts 1 through 10, 1962 Test Program	M. G. Brown	Apr-63	Pavement Design & Pavement Performance
<a href="#">SPR-419</a>	Corrosion of Painted Steel Right-of-Way Posts	B. W. Pocock, O. L. Lindy	Apr-63	Materials
<a href="#">SPR-420</a>	Progress Report on 1962 Traffic Paint Performance Tests	A. J. Permoda	Apr-63	Materials
<a href="#">SPR-421</a>	Profilometer Measurement of Bridge Roughness, First Progress Report	C. J. Arnold, C. D. Church	May-63	Bridge & Special Structures Design
<a href="#">SPR-422</a>	Right-of-Way Fence Sagging Investigation	B. W. Pocock	May-63	Right of Way Permitting
<a href="#">SPR-423</a>	Soil-Aggregate Cushions for Prevention of Reflection Cracking of Resurfaced Pavements, First Progress Report	F. Copple	May-63	Environmental
<a href="#">SPR-424</a>	Repair of Continuously Reinforced Experimental Pavement: I-96 from Portland Road to M-66	J. E. Simonsen	May-63	Pavement Design & Pavement Performance
<a href="#">SPR-425</a>	Terminal Report on Performance of Experimental Concrete Pavement Containing HP 7 Admixture: US-23A in Rogers City (Project F 71-24, C1)	O. L. Lindy	Jun-63	Pavement Design & Pavement Performance
<a href="#">SPR-426</a>	Insulation Between Steel and Aluminum for Extruded Traffic Sign Mountings	B. W. Pocock, C. A. Zapata	Jun-63	Materials
<a href="#">SPR-427R</a>	Transverse Cracking of New Concrete Pavement: M-37 from Ballards to Casnovia (Projects BF 41033D, C7U & C8/R; BF 41033E, C9U & C10R; BF 61171A, C1U)	O. L. Lindy	Dec-63	Pavement Design & Pavement Performance
<a href="#">SPR-428</a>	Construction of Michigan's Experimental Transverse Joint Project, I-96 from Meridian Road to Wallace Road (Projects EBI 33084, C5 and C7; EBI 33085, C1)	J. E. Simonsen	Jan-64	Pavement Design & Pavement Performance
<a href="#">SPR-429</a>	Barrett Urethane Rigid Foam Joint Filler	A. J. Permoda	May-63	Pavement Design & Pavement Performance
<a href="#">SPR-430</a>	Profilometer Measurement of Bridge Roughness, Second Progress Report	C. D. Church	Jun-63	Bridge & Special Structures Design
<a href="#">SPR-431</a>	Summaries of Michigan Pavement Roughness, 1962 Test Program	P. M. Schafer	Oct-63	Pavement Design & Pavement Performance
<a href="#">SPR-432</a>	Reflectorized Delineator Posts (Mid-States Steel and Wire Company)	M. H. Janson, P. J. Chamberlain	Oct-63	Systems, Maintenance & Operations
<a href="#">SPR-433</a>	Rusting of Cadmium-Plated Bolt Assemblies on Bridge Railings	P. G. Gray	Sep-63	Bridge & Special Structures Design

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<a href="#">SPR-434</a>	Investigation of Defective Concrete in Bridge Deck Pour: B01 of 63081D, C6 (Southbound I-696 over the Rough River)	M. G. Brown	Aug-63	Bridge & Special Structures Design
<a href="#">SPR-435</a>	Evaluation of Preformed Rubber Sealer on M-46 West of Alma (Construction Project F29-23 C2)	A. J. Permoda	Sep-63	Materials
<a href="#">SPR-436</a>	Hydraulic Oil for Use in the Houghton-Hancock Bridge	D. F. Simmons	Sep-63	Bridge & Special Structures Design
<a href="#">SPR-437</a>	Permalastic "J-Seal PX-1424" Two-Component Joint Sealant	A. J. Permoda	Sep-63	Pavement Design & Pavement Performance
<a href="#">SPR-438</a>	Preservative Treatments for Timber Piling, Second Progress Report	B. W. Pocock	Sep-63	Materials
<a href="#">SPR-439</a>	Progress Report on Salt Stabilized Sections of M-46 (Howard City to Newaygo), 1963 Surveys and Testing	R. C. Mainfort	Oct-63	Pavement Design & Pavement Performance
<a href="#">SPR-440</a>	Progress Report on Witcogard Rustproofer for Guard Rails	A. J. Permoda	Oct-63	Materials
<a href="#">SPR-441</a>	Concrete Durability on Bridge Deck Widening: I-94, Edsel Ford Expressway Structure over Dequindre Yards (EBBI X01 of 82024B, C5)	M. G. Brown	Oct-63	Bridge & Special Structures Design
<a href="#">SPR-442</a>	Investigation of Deck Cracking; I-96 EB over the Grand River in Grand Rapids (B02 of 41027A, C2)	G. R. Cudney, M. G. Brown	Oct-63	Bridge & Special Structures Design
<a href="#">SPR-443</a>	Profilometer Measurement of Bridge Roughness, Third Progress Report	C. D. Church	Nov-63	Bridge & Special Structures Design
<a href="#">SPR-444</a>	1962 Performance Tests of White and Yellow Traffic Paint (Including Cooperative Tests in Detroit and Wayne County)	A. J. Permoda, R. L. Snider, M. H. Janson	Nov-63	Materials
<a href="#">SPR-445</a>	Polymer Plastic Marker Posts (Handley Industries, Inc.)	A. J. Permoda	Dec-63	Materials
<a href="#">SPR-446</a>	Application and First Inspection of Epoxy Sealers Between Concrete and Bituminous Wearing Surface of Approach Deck Spans of International Bridge at Sault Ste. Marie (B01 of 17034, C3)	A. J. Permoda, R. H. Merrill	Dec-63	Bridge & Special Structures Design
<a href="#">SPR-447</a>	Summary of Bituminous Concrete Skid Test Data Relative to Materials	M. G. Brown	Jan-64	Pavement Design & Pavement Performance
<a href="#">SPR-448</a>	Failure and Repair of Experimental Continuously Reinforced Concrete Pavement: I-96 Portland Road to M-66	J. E. Simonsen	Mar-64	Pavement Design & Pavement Performance
<a href="#">SPR-449</a>	Progress Report on "Tedlar" DuPont Polyvinyl Fluoride Film, Pre-Finished Metals, Inc.	A. J. Permoda	Feb-64	Materials
<a href="#">SPR-450</a>	Profilometer Measurement of Bridge Roughness, Fourth Progress Report	C. D. Church	Feb-64	Bridge & Special Structures Design
<a href="#">SPR-451</a>	Lime Treatment of a Detroit Silty Clay; M-39, Southfield Expressway at Oakwood Blvd., Dearborn (Project U 82192B, C21)	E. C. Novak, Jr., R. C. Mainfort	Apr-64	Materials
<a href="#">SPR-452</a>	Progress Report on the Experimental Transverse Joint Project I-96 from Meridian Road to Wallace Road	L. T. Oehler	Feb-64	Pavement Design & Pavement Performance
<a href="#">SPR-453</a>	Fasson Reflective Sheeting (Fasson Products Co.)	M. H. Janson	Mar-64	Materials



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<a href="#">SPR-454</a>	Decayed Dimension Guard Rail Posts near Farmington	W. L. Frederick	Mar-64	Materials
<a href="#">SPR-455</a>	Installation and First Inspection of Experimental Joint Sealants on I-496 (Construction Projects I 33045D, C1, S12 and S14 of 33045D) I-496-7(4) 146	A. J. Permoda	Apr-64	Pavement Design & Pavement Performance
<a href="#">SPR-456</a>	Failure of I-94 Joint Sealants: Mt. Clemens to Marysville	M. G. Brown, D. F. Simmons	Apr-64	Pavement Design & Pavement Performance
<a href="#">SPR-457</a>	Progress Report on 1963 Traffic Paint Performance Tests	A. J. Permoda	Apr-64	Materials
<a href="#">SPR-458</a>	Scaling of Concrete Bridge Decks Constructed with Stay-In Place Forms	R. H. Merrill, J. E. Simonsen	Apr-64	Bridge & Special Structures Design
<a href="#">SPR-459</a>	Michigan's Experiment in Using "Unitubes" to Form Transverse Joints (Construction Project EBI 33084, C7)	J. E. Simonsen, L. T. Oehler	Apr-64	Pavement Design & Pavement Performance
<a href="#">SPR-460</a>	Fifth Progress Report on Special Painting of Steel Bridge Girders Under Project Bridges and Bridge Railings—Construction and Maintenance	A. J. Permoda	May-64	Bridge & Special Structures Design
<a href="#">SPR-461</a>	Skid Test Results at High-Accident Intersections: Districts 1 through 10—1963 Test Program	P. M. Schafer, C. D. Church	May-64	Pavement Design & Pavement Performance
<a href="#">SPR-462</a>	Investigation of Snow Fence Post Breakage	J. T. Ellis, C. J. Arnold	Jun-64	Materials
<a href="#">SPR-463</a>	Use of Silicone Admixture in Bridge Deck Concrete: Scotten Avenue Over US-12 (Michigan Avenue), Detroit (MB S04 of 82062C, C3)	M. G. Brown, R. H. Merrill	Jun-64	Bridge & Special Structures Design
<a href="#">SPR-464</a>	Smoke and Corrosive Industrial Refuse Investigation: I-75 High Level Bridge over the Rouge River, Detroit (Construction Project B01 of 82194G)	W. H. Janson, W. L. Frederick, M. G. Brown, C. C. Rhodes	Jul-64	Environmental
<a href="#">SPR-465</a>	Pavement Evaluation of I-94 Control Section 82021; Detroit Industrial Expressway from Rawsonville Road (Washtenaw-Wayne County Line) to Hannan Road	F. Copple	Jul-64	Pavement Design & Pavement Performance
<a href="#">SPR-466</a>	Application and Performance of Epoxy Sealants on Bridge Deck and Walks: Houghton-Hancock Lift Bridge (B01 of 31012)	A. J. Permoda, R. H. Merrill	Aug-64	Bridge & Special Structures Design
<a href="#">SPR-467</a>	Preservative Treatments for Timber Piling: Two-Year Inspection, Third Progress Report	B. W. Pocock, W. W. Miller	Aug-64	Materials
<a href="#">SPR-468</a>	Contract Resealing of Transverse Joints: Sealing and Performance of 1963 Maintenance Projects	D. F. Simmons, J. E. Simonsen	Sep-64	Pavement Design & Pavement Performance
<a href="#">SPR-469</a>	Profilometer Measurement of Bridge Roughness, Fifth Progress Report	C. D. Church	Sep-64	Bridge & Special Structures Design
<a href="#">SPR-470</a>	Soil-Aggregate Cushions for Prevention of Reflection Cracking of Resurfaced Pavements, Second Progress Report	F. Copple	Sep-64	Environmental
<a href="#">SPR-471</a>	Evaluation of Telespar Tubing for Use as Highway Sign Supports	J. E. Simonsen	Sep-64	Materials
<a href="#">SPR-472</a>	Second Annual Inspection of Epoxy Sealer Between the Concrete and Bituminous Wearing Surface of the Approach Deck Spans of the International Bridge at Sault Ste Marie (B01 of 17034)	A. J. Permoda	Sep-64	Bridge & Special Structures Design



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<a href="#">SPR-473</a>	Early Scaling of Concrete Pavement: US-41 Marquette Bypass (Construction Project U 52042E, C8)	M. G. Brown, R. H. Merrill	Nov-64	Pavement Design & Pavement Performance
<a href="#">SPR-474</a>	Galvanized (Zinc Alloy) Steel Base Plates for Joints	O. L. Lindy	Sep-64	Pavement Design & Pavement Performance
<a href="#">SPR-475</a>	Experimental Use of Goodyear "Pliopave L-170" Latex Additive in Single Seal of Existing Sealed Shoulders on I-96 near Ionia (Construction Project Group MR-4 SC-5A, Control Section 34044)	D. F. Simmons	Sep-64	Materials
<a href="#">SPR-476</a>	Application and First Inspection of "Epoexal" Penetrating Sealer on Lansing Area Bridge Decks	R. H. Merrill, F. J. Bashore	Sep-64	Bridge & Special Structures Design
<a href="#">SPR-477</a>	Test Application and First Inspection of Koppers Concrete Sealer on Northbound I-496 over GTW RR (X06 of 33045)	F. J. Bashore, R. H. Merrill	Sep-64	Pavement Design & Pavement Performance
<a href="#">SPR-478</a>	Alleged Damage to Dwelling of A.T. Schmidt, Vassar, Michigan	C. J. Arnold	Oct-64	Environmental
<a href="#">SPR-479</a>	Summary of Laboratory Evaluation of "Silexore" Protective Coatings for Concrete	M. G. Brown	Oct-64	Pavement Design & Pavement Performance
<a href="#">SPR-480</a>	1963 Performance Tests of White and Yellow Traffic Paint: (Including Cooperative Tests in Detroit and Wayne County)	A. J. Permoda, R. L. Snider, M. H. Janson	Nov-64	Materials
<a href="#">SPR-481</a>	Thermoplastic Pavement Marking on W. P. Chrysler Freeway (Projects BI 82111C, C24; BI 82251C, C34)	A. J. Permoda	Nov-64	Pavement Design & Pavement Performance
<a href="#">SPR-482</a>	Field Installation and Inspection of Polymer Plastic Marker Posts	F. J. Bashore	Oct-64	Materials
<a href="#">SPR-483</a>	Paint Peeling Off Pressure-Treated Wood Posts	A. J. Permoda	Oct-64	Materials
<a href="#">SPR-484</a>	Performance of Extruded Neoprene Joint Sealer: I-96 from Waverly Road to M-99 (Construction Project EBACI 33083A C1)	C. C. Rhodes, J. E. Simonsen, D. F. Simmons	Nov-64	Pavement Design & Pavement Performance
<a href="#">SPR-485R</a>	Evaluation of Hook Bolts for Longitudinal Bulkhead Construction Joints	J. E. Simonsen, P. Milliman	Jan-65	Pavement Design & Pavement Performance
<a href="#">SPR-486</a>	Repair of Rubber Pad Railroad Crossing (NYC RR Crossing US-23 South of Dundee)	J. E. Simonsen	Jan-65	Multi-Modal
<a href="#">SPR-487</a>	Construction and Sealing of Transverse Contraction Joints Containing Acme Load Transfer Assemblies	J. E. Simonsen	Dec-64	Pavement Design & Pavement Performance
<a href="#">SPR-488</a>	Study of Defective Concrete in Structures on US-2 West of Watersmeet (B02, B03, B04 of 27023B)	R. H. Merrill	Dec-64	Pavement Design & Pavement Performance
<a href="#">SPR-489</a>	Progress Report on Evaluation and Application Study of General Motors Corporation Rapid Travel Profilometer	L. T. Oehler, P. Milliman	Dec-64	Systems, Maintenance & Operations
<a href="#">SPR-490</a>	Determination of Air Content in Hardened Concrete by Gamma-Ray Transmission	B. W. Pocock, W. W. Miller	Sep-67	Pavement Design & Pavement Performance
<a href="#">SPR-491</a>	Progress Report on Salt Stabilized Sections of M-46 (Howard City to Newaygo): 1964 Surveys and Testing	R. C. Mainfort	Jan-65	Pavement Design & Pavement Performance

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<a href="#">SPR-492</a>	Profilometer Measurement of Bridge Roughness, Sixth Progress Report	C. D. Church	Feb-65	Bridge & Special Structures Design
<a href="#">SPR-493</a>	Performance of Hot-Poured and Cold-Applied Joint Sealers	C. C. Rhodes, L. T. Oehler	Feb-65	Pavement Design & Pavement Performance
<a href="#">SPR-494</a>	Further Development and Evaluation of The Michigan Nuclear Gage	R. C. Mainfort, J. H. DeFoe	Apr-65	Systems, Maintenance & Operations
<a href="#">SPR-495</a>	Field Evaluation of the Ohmart Nuclear Weighing System	F. Copple	Mar-65	Systems, Maintenance & Operations
<a href="#">SPR-496R</a>	Evaluation of Two-Component, Cold-Pour Joint Sealing in I-75 Rest Areas: Construction Projects I 25032C, C7; BI 73171C, C19; I 09034C, C10 Federal Designations I-75-2(89), I-75-2(90), I-75-2(91)	D. F. Simmons	Mar-65	Pavement Design & Pavement Performance
<a href="#">SPR-497R</a>	Studies of Corrosion Resistance of Dowel Bars	A. J. Permoda, O. L. Lindy	May-65	Materials
<a href="#">SPR-498</a>	Automatic Weighing of Vehicles in Motion and Collection of Traffic Data by Electronic Methods: Report on Interim Experimental Program Designated "Post Part A"	P. Milliman	Feb-65	Commercial Vehicle Enforcement
<a href="#">SPR-499</a>	Anti-Glare Fence Specifications	B. W. Pocock	Feb-65	Transportation Safety
<a href="#">SPR-500</a>	Operating Manual for the Michigan Nuclear Soil Density-Moisture Gage	J. H. DeFoe	Mar-65	Systems, Maintenance & Operations
<a href="#">SPR-501</a>	Proprietary Surface Conversion Treatments for Aluminum	A. J. Permoda	Mar-65	Materials
<a href="#">SPR-502</a>	Snap-In Reflector Buttons	L. T. Oehler	Mar-65	Materials
<a href="#">SPR-503</a>	Blink-A-Lite "Caution" Sign	M. H. Janson	Mar-65	Materials
<a href="#">SPR-504</a>	Effect on Bridges of Proposed Changes in Permissible Truck Loads	L. T. Oehler	Mar-65	Asset Management
<a href="#">SPR-505</a>	Experimental Installation of Chrome-Alloy-Steel Dowels: I-196 from the Grand River to Fuller Avenue, Grand Rapids, Federal Designation I 196-5(47) 72	J. E. Simonsen	Apr-65	Materials
<a href="#">SPR-506</a>	Progress Report on 1964 Traffic Paint Performance Tests	A. J. Permoda	Apr-65	Materials
<a href="#">SPR-507</a>	Test Rod Skidometer Data for the 1964 Test Year	P. M. Schafer	Apr-65	Pavement Design & Pavement Performance
<a href="#">SPR-508</a>	Protective Coatings for Structural Steel, Third Progress Report	A. J. Permoda, R. L. Snider	Jul-65	Materials
<a href="#">SPR-509</a>	Sampling and Analysis of Artesian Water in Caisson No. 4 on Fisher Expressway (I-75) Crossing Rouge River in Detroit (B01 of 82194G, C1)	M. G. Brown	Apr-65	Environmental
<a href="#">SPR-510</a>	Survey of Substructures on Edsel Ford Freeway	O. L. Lindy	May-65	Bridge & Special Structures Design
<a href="#">SPR-511</a>	Rust Dissolver and Manganese-Phospholene No. 7	A. J. Permoda	Apr-65	Materials

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<a href="#">SPR-512</a>	Laboratory Test Results on Safe-Ray Glass Beads (High Intensity) for Pavement Marking	A. J. Permoda	Apr-65	Materials
<a href="#">SPR-513</a>	Performance of Aggregate from the Clarence Sweet Pit (No.3-65) in I-196 Pavement North of South Haven	E. A. Finney	May-65	Materials
<a href="#">SPR-514</a>	Plastic "Men Working" Sign	M. H. Janson	Apr-65	Materials
<a href="#">SPR-515</a>	Plastic Signal Lenses	M. H. Janson	Apr-65	Materials
<a href="#">SPR-516</a>	Inspection of Projects Containing Selected Big Cut Pit Aggregate	F. Copple	Apr-65	Materials
<a href="#">SPR-517</a>	Dynamic Aspects of Vehicle Size and Weight	E. A. Finney	May-65	Commercial Vehicle Enforcement
<a href="#">SPR-518</a>	Evaluation of "Ethaforam" Proposed Joint Sealer	M. G. Brown	May-65	Pavement Design & Pavement Performance
<a href="#">SPR-519</a>	Evaluation of "Epoximent" Admixture for Mortar or Concrete	R. H. Merrill	May-65	Materials
<a href="#">SPR-520R</a>	Survey of I-94 Bridge Crossing Clinton River Cutoff Canal (B01 of 50111)	F. Copple	Jun-65	Bridge & Special Structures Design
<a href="#">SPR-521</a>	Skid Proofing Treatments at South Cedar Street (US-127) Intersections with Holmes Road and Baker Street in Lansing	R. H. Merrill	Jun-65	Pavement Design & Pavement Performance
<a href="#">SPR-522</a>	Structural Evaluation of Steel Snow Fence Posts	H. C. Brunke	Jun-65	Materials
<a href="#">SPR-523</a>	Pavement Evaluation of I-94 Control Section 82022: Detroit Industrial Expressway from Ozga Road to US-24 Telegraph Road	F. Copple	Jun-65	Pavement Design & Pavement Performance
<a href="#">SPR-524</a>	Sixth Progress Report on Special Painting of Steel Bridge Girders under Project: Bridges and Bridge Railings, Construction and Maintenance	A. J. Permoda	Jun-65	Bridge & Special Structures Design
<a href="#">SPR-525</a>	Failures of Two-Component, Cold-Pour Joint Sealant in New Pavement Construction	F. J. Bashore	Jun-65	Pavement Design & Pavement Performance
<a href="#">SPR-526</a>	Summaries of Michigan Pavement Roughness: 1963-64 Test Program	P. M. Schafer	Jun-65	Pavement Design & Pavement Performance
<a href="#">SPR-527R</a>	Field Evaluation of Styrofoam as Insulation Against Frost Effects in Flexible Pavement Foundation Components	E. C. Novak, Jr., R. C. Mainfort	Oct-65	Materials
<a href="#">SPR-528</a>	Met-Fiber Joint-Forming Material	L. T. Oehler	Jun-65	Pavement Design & Pavement Performance
<a href="#">SPR-529</a>	Use of a Silicone Admixture in Bridge Deck Concrete: Coe Road over US-27, North of Alma (MB S01 of 37013C, C13)	R. H. Merrill, C. A. Zapata	Sep-65	Bridge & Special Structures Design
<a href="#">SPR-530</a>	Inspection of Neoprene Preformed Sealant Failures in Battle Creek Projects (I 13033D, C8 and U 13121E, C2, C3)	F. J. Bashore	Jul-65	Materials
<a href="#">SPR-531</a>	Evaluation of "Rhap-Trol" Herbicide Spray System	M. H. Janson	Jun-65	Materials

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<a href="#">SPR-532</a>	Progress Report on Test Applications of 3M's "Instant Set" Paint Striping	A. J. Permoda	Jul-65	Materials
<a href="#">SPR-533</a>	Inspection of Pavement Joint Blowup on US-131 North of Grand Rapids (Construction Project 41-90, C4)	F. Copple	Jul-65	Pavement Design & Pavement Performance
<a href="#">SPR-534</a>	"Adjus-To-Grade" Manhole Casting (National Utility Products Co.)	C. J. Arnold	Jun-65	Materials
<a href="#">SPR-535</a>	Experimental Shoulder Stabilization on US-23 North of Alpena (MN 04032, C6)	R. C. Mainfort	Jul-65	Geotechnical & Foundataion Design
<a href="#">SPR-536</a>	Joint Failures on Eastbound I-94, Parma to Jackson (Construction Project 38-48, C9)	J. E. Simonsen	Jul-65	Pavement Design & Pavement Performance
<a href="#">SPR-537</a>	Mercury Vapor "Super Lumen" Lights (Jewel Electric Products Inc.)	M. H. Janson	Jul-65	Materials
<a href="#">SPR-538</a>	Damping Bridge Vibration During Construction Widening	G. R. Cudney	Jul-65	Bridge & Special Structures Design
<a href="#">SPR-539</a>	Pavement Evaluation of I-94 Control Sections 81041, 81062, and 81063: Detroit Industrial Expressway from Carpenter Road to Rawsonville Road (Washtenaw-Wayne County Line)	F. Copple	Jun-65	Pavement Design & Pavement Performance
<a href="#">SPR-540</a>	Aluminum Delineator Posts (Reynolds Metals Co.)	H. C. Brunke	Aug-65	Systems, Maintenance & Operations
<a href="#">SPR-541</a>	US-127 Blowup South of Jackson (Construction Project 38-7, C5)	J. E. Simonsen	Sep-65	Pavement Design & Pavement Performance
<a href="#">SPR-542</a>	Profilometer Measurement of Bridge Roughness, Seventh Progress Report	C. D. Church	Nov-65	Bridge & Special Structures Design
<a href="#">SPR-543</a>	Evaluation of Expansion-Contraction Joint Construction Methods: M-153 North of Ypsilanti (Construction Project F 81121A, C2)	J. E. Simonsen	Sep-65	Pavement Design & Pavement Performance
<a href="#">SPR-544</a>	Depth of Nuclear Gage Influence in Subbase Testing	R. C. Mainfort	Aug-65	Systems, Maintenance & Operations
<a href="#">SPR-545</a>	Joint Blowup, I-94 East of US-127 Bypass, Jackson County	F. Copple	Sep-65	Pavement Design & Pavement Performance
<a href="#">SPR-546</a>	Testing of "Coherex" Emulsified Oil	R. C. Mainfort	Sep-65	Materials
<a href="#">SPR-547</a>	Preservative Treatments for Timber Piling: Three Year Inspection, Fourth Progress Report	B. W. Pocock, W. W. Miller	Sep-65	Materials
<a href="#">SPR-548</a>	Fifth Progress Report on Salt Stabilized Sections of M-46 (Howard City to Newaygo): 1965 Surveys and Testing	R. C. Mainfort	Sep-65	Pavement Design & Pavement Performance
<a href="#">SPR-549</a>	Lasers—Theory, Technology, and Applications: Report on a University of Michigan Special Summer Short Course (May 10-21, 1965)	W. L. Frederick	Oct-65	Administration & Management
<i>SPR-550</i>	<i>Highway Quality Control Program – No Report</i>	<i>B. W. Pocock, C. A. Zapata, L. F. Holbrook</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-551</a>	X-Ray Technology and Highway Research: Report on an Equipment Symposium: Chicago, June 7-11, 1965	J. T. Ellis	Oct-65	Administration & Management

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<a href="#">SPR-552</a>	Testing of "Chempact" and "Road Packer"	R. C. Mainfort, J. T. Ellis	Oct-65	Materials
<a href="#">SPR-553</a>	SS-22 Soil Stabilizer	R. C. Mainfort	Oct-65	Environmental
<a href="#">SPR-554</a>	Pavement Characteristics at Scales--1965 Truck Weight Study	F. Copple	Oct-65	Commercial Vehicle Enforcement
<a href="#">SPR-555R</a>	Inspection of Pavement Joints on US-127, Hillsdale County	F. Copple	Mar-66	Pavement Design & Pavement Performance
<a href="#">SPR-556</a>	"Niteliner" Striping Application on Edsel Ford Freeway (I-94)	A. J. Permoda	Oct-65	Materials
<a href="#">SPR-557</a>	Grade Separation Carrying Eight Mile Rd over the Couzens Expressway (I-696)	A. J. Permoda, W. L. Frederick	Oct-65	Pavement Design & Pavement Performance
<a href="#">SPR-558</a>	Investigation of Limestone Coarse Aggregate from the Waterville, Ohio, Quarry of the France Stone Company	C. D. Church, G. R. Cudney	Nov-65	Materials
<a href="#">SPR-559</a>	1964 Performance Tests on White and Yellow Traffic Paints, Including Cooperative Tests in Detroit and Wayne County	A. J. Permoda, R. L. Snider, M. H. Hanson	Nov-65	Materials
<a href="#">SPR-560</a>	Progress Report on Thermoplastic Pavement Markings on W. P. Chrysler Freeway (Projects BI 82111C, C24; BI 82251C,C34)	A. J. Permoda	Nov-65	Pavement Design & Pavement Performance
<a href="#">SPR-561R</a>	Prestressed Concrete Beam Construction Practice	C. J. Arnold	Mar-66	Pavement Design & Pavement Performance
<a href="#">SPR-562R</a>	Machine Finishing of I-96 Bridges over the Grand River (B01 and B02 of 2315A)	H. C. Brunke	Dec-65	Bridge & Special Structures Design
<a href="#">SPR-563</a>	Performance of Joint Sealants Used in 1964-65 Michigan Construction	J. E. Simonsen, F. J. Bashore	Dec-65	Pavement Design & Pavement Performance
<a href="#">SPR-564</a>	Second Annual Inspection of Bridge Decks Sealed with "EpoXeal" and "Concrete Sealer"	R. H. Merrill	Dec-65	Bridge & Special Structures Design
<a href="#">SPR-565</a>	Comparison of Fiber Board and Plywood for Use in Roadside Sign Panels	J. E. Simonsen	Feb-66	Materials
<a href="#">SPR-566R</a>	Slab Faulting Measurements at Blowup Repairs on I-94 near Jackson	E. A. Finney	Feb-66	Pavement Design & Pavement Performance
<a href="#">SPR-567</a>	1965 Failure and Repair of Continuously Reinforced Experimental Pavement: I-96 from Portland Road to M-66	J. E. Simonsen	Feb-66	Pavement Design & Pavement Performance
<a href="#">SPR-568</a>	Development of a Neutron Gage for Determination of Mixing Efficiency of Central Mix Concrete Plants	P. Milliman	Dec-66	Systems, Maintenance & Operations
<a href="#">SPR-569</a>	Corrosion Performance of Aluminum Culverts, First Progress Report	J. T. Ellis, J. E. Simonsen	Mar-66	Geotechnical & Foundation Design
<a href="#">SPR-570</a>	Summaries of Michigan Pavement Roughness: 1965 Test Program	P. T. Luce	Jun-66	Pavement Design & Pavement Performance
<a href="#">SPR-571R</a>	Evaluation of Stamp Sand as a Substitute for sand Subbase	R. C. Mainfort, E. C. Novak, Jr.	Jun-66	Materials

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<a href="#">SPR-572</a>	Highway Quality Control Program: Statistical Parameters	L. T. Oehler, C. A. Zapata	Jun-66	Planning
<a href="#">SPR-573</a>	Accident Damage to Aluminum and Steel Guard Rails	J. E. Simonsen	Mar-66	Materials
<a href="#">SPR-574</a>	ASTM A 242 Corrosion Resistant Steel (Mayari-R) Panels in Field Exposure Tests on Eight Mile Road Structure in Detroit	A. J. Permoda	Apr-66	Materials
<a href="#">SPR-575</a>	Special Cores from Deck and Beams of M-21 Structure 3.7 Miles West of Ada (X01 of 41043)	M. G. Brown	Apr-66	Bridge & Special Structures Design
<a href="#">SPR-576</a>	Final Report on Test Applications of 3M's "Instant Set" Paint Striping	A. J. Permoda	Apr-66	Materials
<a href="#">SPR-577</a>	First Progress Report on 1965 Traffic Paint Performance Tests	A. J. Permoda	Apr-66	Materials
<a href="#">SPR-578</a>	Evaluation of a Rubber Pad Railroad Crossing	J. E. Simonsen	Apr-66	Multi-Modal
<a href="#">SPR-579</a>	Epoxy and Cement-Type Compounds for Grouting	C. J. Arnold, M. G. Brown	Apr-66	Materials
<a href="#">SPR-580</a>	Review of the Department's Experience with Vinyl Type Coatings for Bridge Structural Steel	A. J. Permoda	Apr-66	Bridge & Special Structures Design
<a href="#">SPR-581</a>	Sign Brightness in Relation to Legibility	T. M. Allen, G. M. Smith, M. H. Janson, F. N. Dyer	Aug-66	Transportation Safety
<a href="#">SPR-582</a>	An Appraisal of Transverse Joint Base Plates	E. A. Finney	Jun-66	Pavement Design & Pavement Performance
<i>SPR-583</i>	<i>Acceptance of Pavement on the Basis of Modulus of Rupture Tests (7-day, 5.5 Cement Factor, 9-in. Pavement) – Not Released for Publication</i>	<i>C. D. Church</i>	<i>Jun-67</i>	<i>Not Available</i>
<a href="#">SPR-584</a>	Fracture-Plane Deterioration of Concrete Bridge Decks: Bridge S05 of 63022, Wixom Road over I-96	G. R. Cudney	May-66	Bridge & Special Structures Design
<a href="#">SPR-585</a>	Summaries of Michigan Pavement Skid Resistance: 1965 Test Program	P. M. Schafer	Jun-66	Pavement Design & Pavement Performance
<a href="#">SPR-586</a>	Application for Instrumental Methods for Evaluating Highway Materials: First Progress Report—Determination of Amount of "Plastiment A" Retarder in Hardened Cement	W. L. Frederick, J. T. Ellis	Nov-66	Bridge & Special Structures Design
<a href="#">SPR-587</a>	Economic Considerations in the Use of Corrosion-Resistant A 242 Structural Steel for Bridge Structures	L. T. Oehler	Jun-66	Bridge & Special Structures Design
<i>SPR-588R</i>	<i>Design Considerations for Continuously Reinforced Concrete Pavement: Proposed I-696, Lahser Road to Eleven Mile Road. – Report Withdrawn. See Research Report Number SPR-609</i>	<i>F. Copple</i>	<i>N/A</i>	<i>Not Available</i>
<i>SPR-589R</i>	<i>Design Considerations for Continuously Reinforced Concrete Pavement: Proposed I-275, Buhl Road to Schoolcraft Road. – Report Withdrawn. See Research Report Number SPR-609</i>	<i>F. Copple</i>	<i>N/A</i>	<i>Not Available</i>
<i>SPR-590R</i>	<i>Design Considerations for Continuously Reinforced concrete Pavement: Proposed I-96, Haggerty Road to Ambassador Bridge. - Report Withdrawn. See Research Report Number SPR-609</i>	<i>F. Copple</i>	<i>N/A</i>	<i>Not Available</i>

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<a href="#">SPR-591</a>	Corrosion-Resistant Dowel Bars	E. A. Finney, A. J. Permoda	Aug-66	Materials
<a href="#">SPR-592</a>	Compaction Control of a Major Construction Project With the Michigan Nuclear Gage: US-127 Relocation, Holt Road to I-96 (F 33035B, C1 BI 33084A, C21)	J. H. Defoe, R. C. Mainfort	Nov-66	Pavement Design & Pavement Performance
<a href="#">SPR-593</a>	Photometric Test for Reflective Materials	M. H. Janson, G. M. Smith	Jul-66	Materials
<a href="#">SPR-594</a>	Presstite Tape for Protection of New Joints Before Sealing	F. Copple	Aug-66	Pavement Design & Pavement Performance
<a href="#">SPR-595</a>	"Fiberglas" Reinforced Plastic Rods	G. R. Cudney	Aug-66	Materials
<a href="#">SPR-596R</a>	Degradation of Base Course Aggregates	E. C. Novak, Jr., R. C. Mainfort	Sep-66	Materials
<i>SPR-597</i>	<i>Statistical Inspection Plans for Conformance of Preformed Joint Sealants: A Preliminary Discussion –No Report</i>	<i>C. D. Church</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-598</a>	Base Course Stabilization with Asphalt Emulsion: US-131 South of Cadillac (Construction Project F 83031A, C6)	E. C. Novak, Jr., R.C. Mainfort	Sep-66	Materials
<a href="#">SPR-599R</a>	Soil-Aggregate Cushions for Prevention of Reflection Cracking of Resurfaced Pavements, Third Progress Report	F. Copple	Oct-66	Environmental
<a href="#">SPR-600</a>	Evaluation of the Speedy Moisture Tester	E. C. Novak, Jr., L. D. Searcy	Oct-66	Materials
<a href="#">SPR-601</a>	Break-Away-Sign Supports	C. J. Arnold	Sep-66	Transportation Safety
<a href="#">SPR-602</a>	First Progress Report on Evaluation of Experimental Paint Coatings for Bridge Steel on S01 of 33031, S02 of 33032, S07 of 38131	A. J. Permoda	Nov-66	Bridge & Special Structures Design
<i>SPR-603</i>	<i>Bridge Strain Histories and Effects on Steel Bridge Stringers. Discussion of a Highway Planning and Research Project "Effect of Loadings on Bridge Life" Conducted in Cooperation with the U. S. Department of Commerce, Bureau of Public Roads. No Report</i>	<i>L. T. Oehler, G. R. Cudney</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-604</a>	Investigation of Retarder in Bridge Deck Concrete, B04 of 82053A, C39 (US-24 over Upper Branch of Rouge River, Detroit)	M. G. Brown	Oct-66	Bridge & Special Structures Design
<a href="#">SPR-605</a>	"Surface Modified 1M" Metal coatings (Dow Chemical Company)	A. J. Permoda	Sep-66	Materials
<a href="#">SPR-606</a>	"Fiberglas" Reinforced Plastic Rods	J. E. Simonsen	Sep-66	Materials
<a href="#">SPR-607</a>	Deck Rippling on the I-75 Rouge River Bridge (B01 of 82194G, C7), Second Progress Report	L. T. Oehler, G. R. Cudney	Oct-66	Bridge & Special Structures Design
<a href="#">SPR-608</a>	Deck Rippling on Various Michigan Bridges, Third Progress Report	C. J. Arnold	Oct-66	Bridge & Special Structures Design
<a href="#">SPR-609</a>	Procedure for Design of Continuously Reinforced Concrete Pavements	F. Copple	Oct-66	Pavement Design & Pavement Performance
<a href="#">SPR-610</a>	Impact Tests of Breakaway Light Poles	J. E. Simonsen, F. DeRose	Oct-66	Transportation Safety



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<a href="#">SPR-611</a>	1965 Performance Tests on White and Yellow Traffic Paints (Including Cooperative Tests in Detroit and Wayne County)	A. J. Permoda, G. C. Sigsby, M. H. Janson	Nov-66	Materials
<a href="#">SPR-612</a>	Michigan's Experience with Nuclear Gages for Measuring Soil Compaction	R. C. Mainfort	Nov-66	Systems, Maintenance & Operations
<a href="#">SPR-613</a>	Flashing Arrow-Bar Traffic Control Signs: A Report of Comparison Testing	F. Copple, P. Milliman	Nov-66	Systems, Maintenance & Operations
<a href="#">SPR-614</a>	Testing of Waste Lime from Bay City	R. C. Mainfort	Nov-66	Materials
<a href="#">SPR-615</a>	Michigan's System for Weighing, Dimensioning, and Classifying Vehicles in Motion	P. Milliman	Nov-66	Commercial Vehicle Enforcement
<a href="#">SPR-616</a>	Artesian Flow of Sulfide Water: I-75 over US-25 (I 82191J, C25)	M. G. Brown	Dec-66	Environmental
<a href="#">SPR-617</a>	"Parlon" Based Curing and Sealing Compound, First Progress Report	H. L. Patterson	Dec-66	Materials
<a href="#">SPR-618</a>	Field Test Applications of "Speed Crete" Patching Mixtures	M. G. Brown	Dec-66	Materials
<a href="#">SPR-619</a>	Field Tests of Epoxy Grout and Expansion Anchors: Supplement to Research Report No. SPR-579	C. J. Arnold, M. G. Brown	Jan-67	Materials
<a href="#">SPR-620</a>	Safety and Economic Considerations in Use of Corrosion-Resistant Steel for Bridge Structures	L. T. Oehler, A. J. Permoda	Jan-67	Bridge & Special Structures Design
<a href="#">SPR-621</a>	Investigation of Concrete Overruns on I-69 Two-Span Continuous-Type Bridges: Pearl Beach Road Over I-69 (S11 of 12033A)	E. L. Marvin	Feb-67	Bridge & Special Structures Design
<a href="#">SPR-622</a>	Investigation of Pavement Damage Caused by Gasoline Truck Fire on Northbound US-23 near Fenton (Construction Project 25031, C2)	H. L. Patterson	Jan-67	Pavement Design & Pavement Performance
<a href="#">SPR-623</a>	Investigation of Concrete Pavement Cracking on the Southbound I-75 Fisher Freeway (Sta. 987+00 to 990+00, Construction Project BI 82194E, C4)	H. L. Patterson	Feb-67	Pavement Design & Pavement Performance
<a href="#">SPR-624</a>	Stabilization of Granular Base Materials with Rock Salt	R. L. Greenman, R. C. Mainfort	Mar-67	Materials
<a href="#">SPR-625</a>	Performance of Joint Sealants Used in 1964, 1965, and 1966 Michigan Construction	F. J. Bashore	Mar-67	Pavement Design & Pavement Performance
<a href="#">SPR-626</a>	"Confilm" Spray-On Film for Control of Evaporation From Fresh Concrete	E. A. Finney	Apr-67	Materials
<a href="#">SPR-627</a>	Failure of Center-Mount Delineators: A Summary of Research Laboratory Observations	M. H. Janson	May-67	Systems, Maintenance & Operations
<a href="#">SPR-628</a>	First Progress Report on 1966 Traffic Paint Performance Tests	A. J. Permoda	Mar-67	Materials
<a href="#">SPR-629</a>	Driving Performance of Aluminum Delineator Posts	E. A. Finney	Mar-67	Systems, Maintenance & Operations
<a href="#">SPR-630</a>	Laboratory Testing of Bituminous Base Course Samples: I-75 North of Wolverine (Construction Project EBI 16093), C3RN	R. C. Mainfort, E. C. Novak	Mar-67	Pavement Design & Pavement Performance



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<a href="#">SPR-631</a>	Summaries of Michigan Pavement Skid Resistance: 1966 Test Program	P. M. Schafer	Apr-67	Pavement Design & Pavement Performance
<a href="#">SPR-632</a>	Summaries of Michigan Pavement Roughness: 1966 Test Program	P. T. Luce	Apr-67	Pavement Design & Pavement Performance
<a href="#">SPR-633</a>	Method of Test and Equipment for Measurement of Pavement Skid Resistance	N/A	Apr-67	Pavement Design & Pavement Performance
<a href="#">SPR-634</a>	Final Report on Michigan Experimental Transverse Joint Project	J. E. Simonsen	Sep-67	Pavement Design & Pavement Performance
<a href="#">SPR-635</a>	Demonstration of Schmidt Post Driver	L. T. Oehler	Apr-67	Construction
<a href="#">SPR-636</a>	Low Compressive Strength of Concrete Pavement Cores from the Eastbound I 75-Fisher Freeway (Sta. 1101+07 to 1101+70, construction Project BI 82194H, C21, Part1)	H. L. Patterson	May-67	Pavement Design & Pavement Performance
<a href="#">SPR-637</a>	Effectiveness of Sawed-Sealed Longitudinal Joints Between Bituminous Shoulders and Rigid Pavement in Reducing Longitudinal Shoulder Cracking: First Progress Report	C. A. Zapata	Aug-67	Geotechnical & Foundataion Design
<a href="#">SPR-638</a>	The Effects of Loadings on Bridge Life	G. R. Cudney	Jan-68	Bridge & Special Structures Design
<a href="#">SPR-639</a>	Mercury Vapor "Super Lumen" Lights (Jewel Electric Products Inc.)	M. H. Janson	Jun-67	Materials
<a href="#">SPR-640</a>	Static Field Tests of Kwik-Bolt and Phillips Stud-Type Concrete Anchors	C. J. Arnold	Jun-67	Materials
<a href="#">SPR-641</a>	Application of Instrumental Methods for Evaluating Highway Materials. Second Progress Report; Detection and Determination of Ground, Cured Scrap Rubber in Hot- Poured Joint Sealers	W. L. Frederick, R. J. Matel	Dec-67	Pavement Design & Pavement Performance
<a href="#">SPR-642</a>	Effect of De-Icing Chemicals on Air-Entrained Concrete at Early Ages	P. T. Luce	Jul-67	Pavement Design & Pavement Performance
<a href="#">SPR-643</a>	Damaged Impellers for Storm Water Pumps	C. J. Arnold	Jul-67	Systems, Maintenance & Operations
<a href="#">SPR-644</a>	Report on Witcogard Rustproofer for Guard Rails	L. T. Oehler	Jul-67	Materials
<a href="#">SPR-645</a>	Fast Drying Traffic Paints	L. T. Oehler	Aug-67	Materials
<a href="#">SPR-646</a>	Inspection Report of Field Applications of "Speed Crete" Patching Mixtures	M. G. Brown	Aug-67	Pavement Design & Pavement Performance
<a href="#">SPR-647</a>	Field Evaluation of Six-Volt and Twelve-Volt Flashers	G. M. Smith, M. H. Janson	Aug-67	Construction
<a href="#">SPR-648</a>	Use of a Concrete Sealant on the High Level Bridge, I-75, Detroit (B01 of 82194G)	H. L. Patterson	Aug-67	Bridge & Special Structures Design
<a href="#">SPR-649</a>	Michigan Investigation of Soil Aggregate Cushions and Reinforced Asphaltic Concrete for Preventing or Reducing Reflection Cracking of Resurfaced Pavements	F. Copple, L. T. Oehler	Jan-68	Environmental
<a href="#">SPR-650</a>	Research Laboratory Division Operations	L. T. Oehler	Jul-67	Administration & Management

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<a href="#">SPR-651</a>	Investigation of Foreign Material Embedded in the Continuously Reinforced Concrete Pavement of the Seaway Freeway (I-75) Construction Project I82194A	L. T. Oehler	Aug-67	Pavement Design & Pavement Performance
<a href="#">SPR-652</a>	Investigation of Rigid Fuse Plates for Use on Breakaway Signs: Progress Report	E. L. Marvin	Nov-67	Transportation Safety
<a href="#">SPR-653</a>	Progress Report on "Terbec C-7" Soil Stabilizer	R. C. Mainfort	Sep-67	Environmental
<a href="#">SPR-654</a>	Extrusion of Neoprene Seals from Expansion Joints in Concrete Pavement	F. J. Bashore	Sep-67	Pavement Design & Pavement Performance
<a href="#">SPR-655</a>	U.S. Rubber "Uniroyal" Advertising Sign, I-94, Detroit	G. M. Smith	Oct-67	Right-of-Way Permitting
<a href="#">SPR-655A</a>	U.S. Rubber "Uniroyal" Advertising Sign, I-94, Detroit – An addendum to Research Report No. SPR-655	L. T. Oehler	Jun-68	Right-of-Way Permitting
<a href="#">SPR-656</a>	1966 Performance Tests on White and Yellow Traffic Paints (Including Cooperative Tests in Detroit and Wayne County)	A. J. Permoda, A. R. Gabel, M. H. Janson	Oct-67	Materials
<a href="#">SPR-657R</a>	Investigation of Concrete Pavement Cores from the Northbound I-75 Freeway	H. L. Patterson	Dec-67	Pavement Design & Pavement Performance
<a href="#">SPR-658</a>	Development of a One-Point Cone Test for Determining Maximum Density of Granular Materials	R. C. Mainfort	Dec-67	Materials
<a href="#">SPR-659</a>	The Effect of Shearing Deformations on Pull-Out Resistance of Steel Dowels Embedded in Concrete	E. L. Marvin	Dec-67	Materials
<a href="#">SPR-660</a>	Comments on the Systems and Procedures Section Report Concerning Combining the Testing Laboratory and the Research Laboratory	L. T. Oehler	Dec-67	Administration & Management
<a href="#">SPR-661</a>	Seventh Progress Report on Special Test Painting on M-78 Bridge Structural Steel	L. T. Oehler	Dec-67	Bridge & Special Structures Design
<a href="#">SPR-662</a>	"Parlon" Based Curing and Sealing Compounds, Second Progress Report	H. L. Patterson	Mar-68	Materials
<a href="#">SPR-663</a>	Evaluation of "Penepriime" as a Stabilizing Agent for Aggregate Shoulders	R. C. Mainfort, J. H. DeFoe	Jan-68	Materials
<a href="#">SPR-664</a>	A Progress Report on the Evaluation and Application Study of General Motors Rapid Travel Road Profilometer	J. R. Darlington, P. Milliman	Jan-68	Bridge & Special Structures Design
<a href="#">SPR-665</a>	3M High-Intensity Reflective Sheeting Delineator Failure	L. T. Oehler	Feb-68	Systems, Maintenance & Operations
<a href="#">SPR-666</a>	Application of Instrumental Methods for Evaluating Highway Materials – Third Progress Report: Pyrolysis Gas Chromatography	J. T. Ellis, W. L. Frederick	Aug-68	Materials
<a href="#">SPR-667</a>	Repair of Plastic Shrinkage Cracks in the Deck of the Nine Mile Road Bridge Over I-75	H. L. Patterson	Mar-68	Bridge & Special Structures Design
<a href="#">SPR-668</a>	Procedures for Repairing Continuously Reinforced Concrete Pavements	J. E. Simonsen	Mar-68	Pavement Design & Pavement Performance
<a href="#">SPR-669</a>	Final Progress Report on Polymer Plastic Marker Posts	F. J. Bashore	Dec-67	Materials

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<a href="#">SPR-670</a>	Performance of Joint Sealants Used in 1964 Through 1967 Michigan Construction, Third Annual Report	F. J. Bashore	Apr-68	Pavement Design & Pavement Performance
<a href="#">SPR-671</a>	Study of Frost Action in Class AA Shoulders Near Pontiac	E. C. Novak, Jr.	Apr-68	Geotechnical & Foundataion Design
<a href="#">SPR-672</a>	Final Report on Test Applications of 3M's "Green Lite or Liquid Instant Set" Paint Striping	L. T. Oehler	May-68	Materials
<a href="#">SPR-673</a>	Investigation of Low Flexural Strengths on Project U 17032-005	H. L. Patterson	May-68	Materials
<a href="#">SPR-674</a>	Summaries of Michigan Pavement Skid Resistance – 1967 Test Program	P. M. Schafer	Jul-68	Pavement Design & Pavement Performance
<a href="#">SPR-675</a>	Summaries of Michigan Pavement Roughness – 1967 Test Program	R. L. Felter, P. T. Luce	May-68	Pavement Design & Pavement Performance
<a href="#">SPR-676</a>	Second Inspection Report of Field Application of "Speed Crete" Patching Mixtures	M. G. Brown	Jun-68	Pavement Design & Pavement Performance
<a href="#">SPR-677</a>	The Effect of Slab Warpage on Stresses at Contraction Joints	E. L. Marvin	Aug-68	Pavement Design & Pavement Performance
<a href="#">SPR-678</a>	Report on Experimental Raised Traffic Markers on I-75 in Detroit	A. J. Permoda	Jul-68	Transportation Safety
<a href="#">SPR-679</a>	Corrosion Performance of Aluminum Culverts, Second Progress Report	J. T. Ellis	Dec-68	Geotechnical & Foundation Design
<a href="#">SPR-680</a>	Pavement Damage Related to Tire Studs	F. Copple	Oct-68	Pavement Design & Pavement Performance
<a href="#">SPR-681</a>	Evaluation of "Protecto + " Styrene-Foam Concrete Cylinder Molds	H. L. Patterson	Sep-68	Materials
<a href="#">SPR-682</a>	Latex-Cement Coating for Metal (Dow Co. SM-200)	A. J. Permoda	Sep-68	Materials
<a href="#">SPR-683</a>	Evaluation of Sawed-Sealed Longitudinal Joints Between Bituminous Shoulders and Rigid Pavement as a Means of Reducing Longitudinal Shoulder Cracking	C. A. Zapata	Sep-68	Geotechnical & Foundataion Design
<a href="#">SPR-684</a>	Feasibility of Portland Cement Concrete Shoulder Construction	L. T. Oehler	Oct-68	Geotechnical & Foundataion Design
<a href="#">SPR-685</a>	Stabilization of Base Course Aggregates with Rock Salt	R. C. Mainfort	Jan-69	Materials
<a href="#">SPR-686</a>	Expansion Joint Spalling on I-75	L. T. Oehler	Oct-68	Pavement Design & Pavement Performance
<a href="#">SPR-687</a>	Protection of Substructure Concrete from Staining by A 588 Type Steel During Construction	A. J. Permoda	Oct-68	Pavement Design & Pavement Performance
<a href="#">SPR-688</a>	Anchorage Resistance of Standard Hook-Bolts	M. A. Chiunti	Nov-68	Materials
<a href="#">SPR-689</a>	Evaluation of Octopus Safety Marker Model No. OC-5-30-64	G. M. Smith	Nov-68	Systems, Maintenance & Operations

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<a href="#">SPR-690</a>	Pull-Out Tests on RS-9 Expansion Anchors	L. T. Oehler	Dec-68	Materials
<a href="#">SPR-691</a>	Evaluation of Electrostatic Spray Equipment in Painting Highway Steel	L. T. Oehler	Jan-69	Materials
<a href="#">SPR-692</a>	Methods For Evaluating Deterioration of In-Service Reflective Sheeting Signs	M. H. Janson, G. M. Smith	Apr-69	Asset Management
<a href="#">SPR-693A</a>	Joint Spalling on State Project BI 49025G, C22, Mackinac County on I-85 from Junction with M-134 Northerly 6.9 Miles	L. T. Oehler	Aug-68	Pavement Design & Pavement Performance
<a href="#">SPR-693B</a>	Joint Repairs on M-59 near Howell	L. T. Oehler	Feb-69	Pavement Design & Pavement Performance
<a href="#">SPR-694</a>	Hot Mix Component-Recordation Evaluation	C. D. Church	Mar-69	Systems, Maintenance & Operations
<a href="#">SPR-695</a>	Evaluation of Experimental Signs	M. H. Janson	Mar-69	Transportation Safety
<a href="#">SPR-696</a>	Protective Coatings for Highway Metals: Fourth Progress Report: Protective Coatings for Structural Steel	A. J. Permoda, A. R. Gabel	Apr-69	Materials
<a href="#">SPR-697</a>	Summaries of Michigan Pavement Roughness; 1968 Test Program	R. L. Felter	May-69	Pavement Design & Pavement Performance
<a href="#">SPR-698</a>	Progress Report on Evaluation of a Rubber Pad Railroad Crossing	J. E. Simonsen	Apr-69	Multi-Modal
<a href="#">SPR-699</a>	Application of Thermoanalytical Techniques to Highway Materials	L. T. Oehler	Jun-69	Materials
<a href="#">SPR-700</a>	Pavement Cracking on I-75 in Hamtramck	R. L. Felter	May-69	Pavement Design & Pavement Performance
<a href="#">SPR-701</a>	Permafused Vinyl Coated Chain Link Fence	J. L. McKenna, F. J. Bashore	Jun-69	Materials
<a href="#">SPR-702</a>	Survey of Substructures on Edsel Ford Freeway	R. L. Felter	May-69	Bridge & Special Structures Design
<a href="#">SPR-703</a>	Continuously Reinforced Concrete Pavement: Welded Bar Mat Reinforcement	J. E. Simonsen	Jun-69	Pavement Design & Pavement Performance
<a href="#">SPR-704</a>	Summaries of Michigan Pavement Skid Resistance; 1968 Test Program	Physical Research Unit	Aug-69	Pavement Design & Pavement Performance
<a href="#">SPR-705</a>	Reflective Sheeting Deterioration on Plywood	M. H. Janson	Jun-69	Materials
<a href="#">SPR-706</a>	Third Progress Report on Thermoplastic Pavement Markings on W. P. Chrysler Freeway	A. J. Permoda	Jun-69	Pavement Design & Pavement Performance
<a href="#">SPR-707</a>	Investigation of Alleged Residential Vibration Damage	C. J. Arnold	Jun-69	Environmental
<a href="#">SPR-708</a>	Proposed Highway Research Laboratory	L. T. Oehler	Jul-69	Administration & Management

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<a href="#">SPR-709</a>	Evaluation of Styrofoam as Insulation Against Frost Action in a Flexible Pavement Foundation	E. C. Novak, Jr., R. C. Mainfort	Aug-69	Materials
<a href="#">SPR-710</a>	Evaluation of Lane Tie Bolts for Slip-Form Paving	L. T. Oehler	Jul-69	Materials
<a href="#">SPR-711</a>	Performance of Michigan's Postwar Concrete Pavement	L. T. Oehler, L. F. Holbrook	Jun-69	Pavement Design & Pavement Performance
<a href="#">SPR-712</a>	Polyethylene Center Strip	J. E. Simonsen	Jul-69	Materials
<a href="#">SPR-713</a>	"Alert Reflective Liquid" (Cataphote Corp.)	A. R. Gabel	Aug-69	Materials
<a href="#">SPR-714</a>	Research Laboratory Operations	L. T. Oehler	Jan-69	Administration & Management
<a href="#">SPR-715</a>	Evaluation of Five Commercial Fast-Setting Hydraulic Patching Mortars	H. L. Patterson	Oct-69	Materials
<a href="#">SPR-716</a>	Protection of Substructure Concrete from A588 Steel Staining by Use of an Aluminum-Pigmented Coating	L. T. Oehler	Aug-69	Pavement Design & Pavement Performance
<a href="#">SPR-717</a>	Corrosion-Resistant Guardrail	L. T. Oehler	Sep-69	Materials
<a href="#">SPR-718</a>	Joint Load Transfer Test Road to Evaluate Acme Load Transfer Assemblies, Plastic Coated Dowels, and End-of-Pour Construction Joint Assemblies	L. T. Oehler	Oct-69	Pavement Design & Pavement Performance
<a href="#">SPR-719</a>	Prediction of Subjective Response to Road Roughness Using the General Motors-Michigan Department of State Highways Rapid Travel Profilometer	L. F. Holbrook	Jul-70	Bridge & Special Structures Design
<a href="#">SPR-720</a>	1968 Performance Tests on White and Yellow Traffic Paints (Including Cooperative Tests in Detroit and Wayne County)	A. J. Permoda, A. R. Gabel, M. H. Janson	Nov-69	Materials
<a href="#">SPR-721</a>	Summary of Highway Department Concern in Connection with the Use of Tire Studs	L. T. Oehler	Dec-69	Pavement Design & Pavement Performance
<a href="#">SPR-722</a>	Aluminum-Coated (Hot Dipped) Bolts for Bridge Railing Posts	A. J. Permoda	Nov-69	Bridge & Special Structures Design
<a href="#">SPR-723</a>	Determination of Cement Content of Hardened Slag Concrete	W. J. Fredrick, J. T. Ellis, V. J. Troms, R. J. Metal	Jul-70	Pavement Design & Pavement Performance
<a href="#">SPR-724</a>	Propane Warning Lights	M. H. Janson	Dec-69	Systems, Maintenance & Operations
<a href="#">SPR-725</a>	Investigation of Pavement Damage by Gasoline Truck Fires to M-20, (Control Section 56023), City of Midland and US-27 (Control Section 37017, C4), South of Mt. Pleasant	H. L. Patterson	Jan-70	Pavement Design & Pavement Performance
<a href="#">SPR-726</a>	Performance of Latex-Modified Mortar on Concrete Bridge Decks	L. T. Oehler	Jan-70	Bridge & Special Structures Design
<i>SPR-727</i>	<i>Application of Instrumental Methods for Evaluating Highway Materials, Fourth Progress Report: Gas Chromatography (II) – No Report</i>	<i>J. T. Ellis, W. L. Fredrick</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-728</a>	A Coordinated Highway Data System for Michigan, (Development of Computer-Based Storage and Retrieval System for State Highway Road & Bridge Construction Data)	C. D. Church	Sep-70	Systems, Maintenance & Operations

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<a href="#">SPR-729</a>	Urethane Foam Insulation of Bridge Concrete	C. A. Zapata, F. J. Bashore, W. E. Casey	Feb-70	Bridge & Special Structures Design
<a href="#">SPR-730</a>	Use of Silicone Admixture in Bridge Deck Concrete	H. L. Patterson	Apr-70	Bridge & Special Structures Design
<a href="#">SPR-731</a>	Evaluation and Application Study of the General Motors Corporation Rapid Travel Profilometer	J. R. Darlington	Oct-70	Bridge & Special Structures Design
<a href="#">SPR-732</a>	Spun-Concrete Light Poles, I-96 and I-296 Kent County	F. Copple	Mar-70	Systems, Maintenance & Operations
<a href="#">SPR-733</a>	Studded Tire Survey, Winter 1970	F. Copple	Mar-70	Pavement Design & Pavement Performance
<a href="#">SPR-734</a>	Evaluation of Paczyme as a Soil Stabilizing Agent	R. C. Mainfort	Apr-70	Environmental
<a href="#">SPR-735</a>	Development of Nuclear Methods for Quality Control of Highway Embankment Construction	R. C. Mainfort	Sep-70	Systems, Maintenance & Operations
<a href="#">SPR-736</a>	"Liquid Green Lite" 3M's Instant Setting Traffic Paint	L. T. Oehler	Apr-70	Materials
<a href="#">SPR-737</a>	Construction of Joint Load Transfer Test Road to Evaluate Acme Load Transfer Assemblies, Plastic Coated Dowels and End-of-Pour Construction Joint Assemblies	J. E. Simonsen	Apr-70	Pavement Design & Pavement Performance
<a href="#">SPR-738</a>	Summaries of Michigan Pavement Roughness, 1969 Test Program	Michigan State Highway Commission	May-70	Pavement Design & Pavement Performance
<a href="#">SPR-739</a>	Evaluation of Open Hearth Slag as a Highway Base Material	J. T. Defoe	May-70	Materials
<a href="#">SPR-740</a>	ASTM A588 Steel in M-102 Structure over I-696 in Detroit	L. T. Oehler	May-70	Bridge & Special Structures Design
<a href="#">SPR-741</a>	An Evaluation of "Effective and Dependable" Reflectorization for Registration Plates	Michigan State Highway Commission	May-70	Transportation Safety
<a href="#">SPR-742</a>	"Bisymmetric Glass Beads" for Pavement Marking from the 3M Company	A. J. Permoda	May-70	Materials
<a href="#">SPR-743</a>	Pavement Joint Spacing in Portland Cement Concrete Pavements	L. T. Oehler	Jun-70	Pavement Design & Pavement Performance
<a href="#">SPR-744</a>	Application of Instrumental Methods for Evaluating Highway Materials, Use of Infrared Spectrophotometry in Acceptance Testing Membrane Curing Compounds for Concrete	W. L. Frederick	Jun-71	Systems, Maintenance & Operations
<a href="#">SPR-745</a>	Evaluation of Nuclear Method for Asphalt Testing	J. H. DeFoe, A. P. Chritz	Jul-70	Systems, Maintenance & Operations
<a href="#">SPR-746</a>	Evaluation of Aggregate Sources of Glacial Origin	N. E. Wingard	May-71	Materials
<a href="#">SPR-747</a>	Michigan Department of State Highways Equipment for Measuring Pavement Skid Resistance	Michigan State Highway Commission	Feb-71	Pavement Design & Pavement Performance
<a href="#">SPR-748</a>	Summaries of Michigan Pavement Skid Resistance, 1969 Test Program	Michigan State Highway Commission	Aug-70	Pavement Design & Pavement Performance

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<a href="#">SPR-749</a>	Evaluation of a Quasi-Elastic Modulus of Granular Base Material	I. AlNouri	Sep-70	Materials
<a href="#">SPR-750</a>	Michigan's Experience with Neoprene Compression Seal	L. T. Oehler, F. J. Bashore	Sep-70	Materials
<a href="#">SPR-751</a>	Application of Instrumental Methods for Evaluating Highway Materials, Infrared Spectra of Epoxy Resins <i>See 1971 Report Volume</i>	W. L. Frederick	Jun-74	Materials
<a href="#">SPR-752</a>	Paint Peeling on Pressure-Treated Posts: Tests Correction by Substituting DuPont "Lucite" Latex for MDSH No. 6B White Paint	A. R. Gabel	Oct-70	Materials
<a href="#">SPR-753R</a>	The Effect of Fines (P-200) on Bituminous Base Mixtures	I. Al Nouri	Feb-71	Materials
<a href="#">SPR-754</a>	Evaluation of Hardy Salt for Ice Control Purposes	R. C. Mainfort	Nov-70	Materials
<a href="#">SPR-755</a>	Proposed Highway Testing Laboratory and Research Laboratory	Michigan State Highway Commission	Nov-70	Administration & Management
<a href="#">SPR-756</a>	Textured Concrete Pavement Surfaces	F. Copple	Nov-70	Pavement Design & Pavement Performance
<a href="#">SPR-757</a>	Plastic Beads for Traffic Paint from Dow Chemical Company	A. J. Permoda	Nov-70	Materials
<a href="#">SPR-758</a>	Theoretical Analysis of a Flexible Pavement Model	E. L. Marvin	Aug-71	Planning
<a href="#">SPR-759</a>	Determination of Concrete Strength in the Arch Ribs of Bridge B01 of 22011 (M-95 over Menominee River)	H. L. Patterson	Feb-71	Bridge & Special Structures Design
<a href="#">SPR-760</a>	1970 Performance Tests of "Fast-Dry" White Traffic Paints plus Comparative Paints	A. J. Permoda	Feb-71	Materials
<a href="#">SPR-761</a>	Summaries of Michigan Pavement Roughness, 1970 Test Program	Michigan State Highway Commission	Jan-71	Pavement Design & Pavement Performance
<a href="#">SPR-762</a>	Progress Report, Concrete Pavement Joint Repair with Pre-Cast Slabs	J. E. Simonsen	Apr-71	Pavement Design & Pavement Performance
<a href="#">SPR-763</a>	Concrete capping Study Final Report, Groesbeck Highway (Project F 50-7, C5) US-127 (project f 33-54, C2)	C. A. Zapata	Mar-71	Pavement Design & Pavement Performance
<a href="#">SPR-764</a>	Low Density Polyethylene Foam for Pressure Relief Joints	F. J. Bashore	Jan-71	Pavement Design & Pavement Performance
<a href="#">SPR-765</a>	Design Recommendation for Continuous Reinforced Pavements in Michigan	L. T. Oehler	Mar-71	Pavement Design & Pavement Performance
<a href="#">SPR-766</a>	Second Annual Studded Tire Survey, Winter 1970-71	F. Copple	Apr-71	Pavement Design & Pavement Performance
<a href="#">SPR-767</a>	Strain and Deflection Measurements on an Experimental Orthotropic Bridge	C. J. Arnold	May-71	Bridge & Special Structures Design
<a href="#">SPR-768</a>	Alleged Damage to the Residence of H. C. Dewitt Due to Traffic Induced Vibrations	C. J. Arnold, L. E. DeFrain	Jun-71	Environmental



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<a href="#">SPR-769</a>	Further Evaluation of Open Hearth Slag as a Highway Base Material	R. C. Mainfort, J. H. DeFoe	Jul-71	Materials
<a href="#">SPR-770</a>	Extent of Gasoline Fire Damage to B02 or 63031, US-24 and US-10 Over the Franklin River in Bingham Farms	H. L. Patterson	Jul-71	Pavement Design & Pavement Performance
<a href="#">SPR-771</a>	Report on Ten-Year Service of Experimental Continuously Reinforced Concrete Pavement in Michigan	J. E. Simonsen, G. R. Cudney	Feb-72	Pavement Design & Pavement Performance
<a href="#">SPR-772</a>	Bridge Deck Cracking Investigation on the Three Continuous Spans of B01 of 73101 E (I-675/Saginaw River)	H. L. Patterson, E. L. Marvin	Jul-71	Bridge & Special Structures Design
<a href="#">SPR-773</a>	Alleged damage to the Residence of S. D. Fralick Due to Traffic Induced Vibrations	C. J. Arnold, I. Al Nouri	Jul-71	Environmental
<a href="#">SPR-774</a>	Determination of Extent of Fire Damage to Span 7 of X03 of 25042 (Ramp B over GT&W RR and I-75 – M-78 Interchange Southwest of Flint)	H. L. Patterson	Aug-71	Pavement Design & Pavement Performance
<a href="#">SPR-775</a>	A Survey of Vehicles Using Studded, Smooth, or Snow Tires in Michigan	F. Copple	Jul-71	Pavement Design & Pavement Performance
<a href="#">SPR-776</a>	Summaries of Michigan Pavement Skid Resistance, 1970 Test Program	Michigan State Highway Commission	Aug-71	Pavement Design & Pavement Performance
<a href="#">SPR-777</a>	Pull-Out Testing of McCormick Precoated Dowel Bars	C. J. Arnold	Aug-71	Materials
<a href="#">SPR-778</a>	Epoxy Mortar Surfacing on the Creyts Road Bridge Over I-496, Lansing (S05 of 23081A): A Report on the First and Second Annual Field Inspections	H. L. Patterson	Aug-71	Bridge & Special Structures Design
<a href="#">SPR-779</a>	Highway Quality Control Program	C. D. Church, F. Copple, C. A. Zapata	Aug-71	Planning
<a href="#">SPR-780</a>	Experimental Shoring to Reduce Vibration During Bridge Deck Widening	C. J. Arnold	Aug-71	Bridge & Special Structures Design
<a href="#">SPR-781</a>	Permeability Characteristics of Various Subbase Materials	E. C. Novak	Aug-71	Materials
<a href="#">SPR-782</a>	Pull-Out Tests of Adiprene-Coated Dowel Bars	C. J. Arnold	Aug-71	Materials
<a href="#">SPR-783</a>	Determination and Improvement of Relevant Pavement Skid Coefficients	F. Copple	Aug-71	Pavement Design & Pavement Performance
<a href="#">SPR-784</a>	Ambient Air Quality Analyses for the Proposed I-696 Corridor	W. L. Frederick, J. T. Ellis	Aug-71	Environmental
<a href="#">SPR-785</a>	Photometric Test for Reflex Reflective Materials	M. H. Janson,	May-72	Materials
<a href="#">SPR-786</a>	Traffic Noise Factors Related to the Proposed MSU Cross Campus Route	G. M. Smith	Sep-71	Environmental
<a href="#">SPR-787</a>	Air Quality Analyses for the Proposed MSU Cross Campus M-43	P. Milliman, L. E. DeFrain	Sep-71	Environmental
<a href="#">SPR-788</a>	Evaluation of Polyethylene Strip for Forming Centerline Joint, Final Report	M. H. Janson, W. L. Frederick	Oct-71	Pavement Design & Pavement Performance



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<a href="#">SPR-789</a>	Survey of Pavement Joint Conditions	J. E. Simonsen	Oct-71	Pavement Design & Pavement Performance
<a href="#">SPR-790R</a>	Recommendations Concerning Concrete Pavement Design and Maintenance	Michigan State Highway Commission	Nov-71	Pavement Design & Pavement Performance
<a href="#">SPR-791</a>	Studded Tires: Their Effect on Highways and Vehicle Safety in Michigan	F. Copple	Nov-71	Asset Management
<a href="#">SPR-792</a>	Performance Evaluation of Mixed-in-Place Bituminous Stabilized Shoulder Gravel	F. Copple, A. P. Chritz	Nov-71	Materials
<a href="#">SPR-793</a>	Noise Impact on Community Building and Pleasant Ridge Recreation Area Due to Proposed I-696 Extension	M. N. Clyde	Nov-71	Environmental
<a href="#">SPR-794</a>	Installation of Traffic Loop Detectors	M. N. Clyde	Nov-71	Materials
<a href="#">SPR-795</a>	Analyses of Stream Water Along US-131 Relocation in Kent and Montcalm Counties, A Progress Report	W. L. Frederick, M. H. Janson	Nov-71	Environmental
<a href="#">SPR-796</a>	Study of Delayed Set in Bridge Deck Pour (S05 of 63103)	M. G. Brown	Dec-71	Bridge & Special Structures Design
<a href="#">SPR-797</a>	Experimental Vehicle Traffic Control Signals: A Final Report	M. N. Clyde	Dec-71	Systems, Maintenance & Operations
<a href="#">SPR-798</a>	1971 Performance Tests of "Fast-Dry" White Pavement Marking Paints	A. J. Permoda	Dec-71	Materials
<a href="#">SPR-799</a>	Evaluation of "Poxicon" Fly Ash Concrete Admixture, Interim Report	H. L. Patterson	Dec-71	Materials
<a href="#">SPR-800</a>	Environmental Geologic Study of the Proposed US-127 Alternate Routes	R. W. Noyce, T. A. Herbert	Jan-72	Environmental
<a href="#">SPR-801</a>	Pull-Out Tests of Scotchkote-Coated Dowel Bars	J. D. Culp	Feb-72	Materials
<a href="#">SPR-802</a>	Developing Composition Specifications for Traffic Paints: Regular-Dry Type	A. J. Permoda, A. R. Gabel	Feb-72	Materials
<a href="#">SPR-803</a>	"Elastizell" as an Insulator for Highway Bases	R. C. Mainfort	Feb-72	Materials
<a href="#">SPR-804</a>	Construction Report on Concrete Pavement Joint Repair with Pre-Cast Slabs	J. E. Simonsen	Feb-72	Pavement Design & Pavement Performance
<a href="#">SPR-805</a>	A Method of Determining Subbase Drainability	E. C. Novak, Jr.	Apr-72	Materials
<a href="#">SPR-806</a>	Environmental Geologic Study of the Proposed US-131 Corridor	F. J. Chenier	Mar-72	Environmental
<a href="#">SPR-807</a>	Expansion Anchors for Use as Lane Ties	M. A. Chiunti	Mar-72	Materials
<a href="#">SPR-808</a>	Snow Plow Damage of "Transflex" Bridge Seals	L. T. Oehler	Mar-72	Bridge & Special Structures Design

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<a href="#">SPR-809</a>	Skid Testing of Seal Coats	L. T. Oehler	Mar-72	Pavement Design & Pavement Performance
<a href="#">SPR-810</a>	Environmental Geologic Study of the Proposed I-69 Alternate Routes	F. G. Belobraidich	Apr-72	Environmental
<i>SPR-811</i>	<i>Study of Aggregate Mix Requirements - No Report</i>	<i>M. G. Brown</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-812</a>	Evaluation of Manhole Step (Giant Step No. 170), Construction Products Corp.	L. T. Oehler	Apr-72	Materials
<a href="#">SPR-813</a>	Evaluation of Thermoplastic Pavement Markings Applied in the Lansing Area in 1968 and 1969	A. J. Permoda, A. R. Gabel	Apr-72	Pavement Design & Pavement Performance
<a href="#">SPR-814</a>	Statewide Determination of Highway Loadings and Conversion to 18-Kip Single Axle Load Equivalence	F. Copple	Mar-73	Commerical Vehicle Enforcement
<a href="#">SPR-815</a>	Hydroplaning on Highways	F. Copple	May-72	Pavement Design & Pavement Performance
<a href="#">SPR-816</a>	Effect of Temperature on the Elastic Response of Asphalt Treated Base Materials	I. Al Nouri	Jun-72	Materials
<a href="#">SPR-817</a>	Field Evaluation of Acid-Treated Open Hearth Slag Base Course (I-75 Dearborn Street Interchange)	J. H. DeFoe, R. C. Mainfort	Jun-72	Pavement Design & Pavement Performance
<a href="#">SPR-818</a>	Cycolac Plastic for Non-Reflectorized Signs	J. T. Ellis	Mar-73	Materials
<a href="#">SPR-819</a>	Kralastic Plastic for Non-Reflectorized Signs	J. T. Ellis	Mar-73	Materials
<a href="#">SPR-820</a>	The Environmental Geology of Proposed I-69	G. R. Foster	Jul-72	Environmental
<a href="#">SPR-821</a>	Development of Louvered Signs to Reduce Wind Load	Michigan State Highway Commission	Jan-73	Bridge & Special Structures Design
<a href="#">SPR-822</a>	Demonstration of Vermeer Saw (I-75 Genesee County)	L. T. Oehler	Jun-72	Materials
<a href="#">SPR-823</a>	Federal and State Air Quality Environmental Protection Requirements and Some Alternative Plans to Meet Them	M. H. Janson, W. L. Frederick	Jul-72	Environmental
<a href="#">SPR-824</a>	Corrugated Metal Pipe Culvert Disintegration, I-75 Mackinac County	J. T. Ellis	Jul-72	Geotechnical & Foundation Design
<a href="#">SPR-825</a>	Expansion Anchors for Lane Ties	C. J. Arnold	Jul-72	Materials
<a href="#">SPR-826</a>	Investigation of Traffic-Induced Vibration at McDade Inc., Real Estate Office in Dearborn	C. J. Arnold	Aug-72	Environmental
<a href="#">SPR-827</a>	Investigation of Low and Erratic Concrete Pavement Core Compressive Strength	H. L. Patterson, M. G. Brown	Feb-73	Pavement Design & Pavement Performance
<a href="#">SPR-828</a>	Pollution of Michigan Urban Atmospheres by Highway Generated Noise	Michigan State Highway Commission	Sep-72	Environmental

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<a href="#">SPR-829</a>	Alleged Damage to the Residence of G. McAvon Due to Traffic Induced Vibrations	I. Al Nouri, C. J. Arnold	Sep-72	Environmental
<a href="#">SPR-830R</a>	Air Quality Section for the Final Environmental Impact Statement for Proposed I-696	Michigan State Highway Commission	Feb-73	Environmental
<a href="#">SPR-831</a>	Summaries of Michigan Pavement Skid Resistance, 1971 Test Program	Michigan State Highway Commission	Sep-72	Pavement Design & Pavement Performance
<a href="#">SPR-832</a>	Environmental Geologic Impact Statement	F. G. Belobraidich	Sep-72	Environmental
<a href="#">SPR-833</a>	Cambridge Green Subdivision Noise Impact Study	M. N. Clyde	Sep-72	Environmental
<a href="#">SPR-834</a>	The Effects of Pavement Drainage Gratings on Bicycle Control for Narrow-Tired Bicycles	L. T. Oehler	Oct-72	Non-Motorized Planning & Performance
<a href="#">SPR-835</a>	Glacial Aggregate Evaluation in Kalamazoo County and Vicinity Michigan	B. P. Shah	May-74	Materials
<a href="#">SPR-836</a>	Evaluation of Catch Basin Grates	C. J. Arnold, L. T. Oehler	Oct-72	Systems, Maintenance & Operations
<a href="#">SPR-837</a>	Frost Insulating Properties of Asphalt-Treated Bases	R. C. Mainfort, E. C. Novak, Jr.	Oct-72	Pavement Design & Pavement Performance
<a href="#">SPR-838</a>	Joint Repair by Epoxy Injection	J. E. Simonsen	Nov-72	Pavement Design & Pavement Performance
<a href="#">SPR-839</a>	Laboratory Evaluation of Type 190 Preformed Neoprene Joint Seal and Lubricant Adhesives in Skewed Bridge Joints	F. J. Bashore	Nov-72	Pavement Design & Pavement Performance
<a href="#">SPR-840</a>	Air Quality Environmental Impact Statement for Proposed I-275 from I-94 to M-153	Michigan State Highway Commission	Nov-72	Environmental
<a href="#">SPR-841</a>	Further Noise Predictions for I-696 EIS	L. T. Oehler	Dec-72	Environmental
<a href="#">SPR-842</a>	Experimental Concrete Pavement Ramps Construction Report	C. J. Arnold, M. A. Chiunti	Jan-73	Pavement Design & Pavement Performance
<a href="#">SPR-843</a>	Semicircular Galvanized Steel Underdrain Pipe ("Full Flo Subdrain")	J. D. Culp	Jan-73	Geotechnical & Foundation Design
<a href="#">SPR-844</a>	Experimental concrete and Bituminous Shoulder Construction Report	C. J. Arnold, M. A. Chiunti	Jan-73	Geotechnical & Foundataion Design
<a href="#">SPR-845</a>	Galvanized Steel Reinforced Concrete Bridge Decks	C. J. Arnold	Jan-73	Bridge & Special Structures Design
<a href="#">SPR-846</a>	1972 Performance Tests of "Fast-Dry" White and Yellow Pavement Marking Paints	A. J. Permoda	Jan-73	Materials
<a href="#">SPR-847</a>	Testing and Evaluation of Corrugated Polyethylene Plastic Drainage Tubing	J. D. Culp	Jan-73	Materials
<a href="#">SPR-848</a>	Corrosion of Aluminum Posts for Bridge Railings	C. J. Arnold, M. A. Chiunti	Feb-73	Bridge & Special Structures Design

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<a href="#">SPR-849</a>	Air Quality Section for the Final Environmental Impact Statement for Proposed I-475	Michigan State Highway Commission	Feb-73	Environmental
<a href="#">SPR-850</a>	Preliminary Study of the Constant Dry Weight (No Weighing) Method of Compaction Control	J. H. DeFoe, E. C. Novak, Jr.	Mar-73	Systems, Maintenance & Operations
<a href="#">SPR-851</a>	Further Noise Predictions for I-696 EIS-II	L. T. Oehler	Mar-73	Environmental
<a href="#">SPR-852</a>	Experimental Steel-Fiber-Reinforced Concrete Overlay	C. J. Arnold, M. G. Brown	Apr-73	Pavement Design & Pavement Performance
<a href="#">SPR-853R</a>	Simplified Technique for Traffic Noise Level Estimation	G. H. Grove	Apr-73	Environmental
<a href="#">SPR-854</a>	Water Quality Investigation on Griffin Lake at the Interchange of M-78 and M-15	M. N. Clyde	Mar-73	Environmental
<a href="#">SPR-855</a>	Random Observations on Performance of Highway Striping in Lansing During 1972-73 Winter	L. T. Oehler	Mar-73	Pavement Design & Pavement Performance
<a href="#">SPR-856</a>	PSI Values for I-94 from Telegraph to Wyoming	M. N. Clyde	Apr-73	Pavement Design & Pavement Performance
<a href="#">SPR-857</a>	Bulkhead Joints for Concrete Base Shoulders	M. A. Chiunti	Apr-73	Geotechnical & Foundation Design
<a href="#">SPR-858</a>	Dynamic Load Aspects of Truck Size and Weight	J. R. Darlington	Aug-73	Commercial Vehicle Enforcement
<a href="#">SPR-859</a>	Preventive Maintenance of Concrete Pavements	J. E. Simonsen	Jun-73	Pavement Design & Pavement Performance
<a href="#">SPR-860</a>	1974 National Transportation Study	M. N. Clyde	Apr-73	Planning
<a href="#">SPR-861</a>	An Evaluation of Mastic-Type Paving Mixtures for Resurfacing a Roadway and a Bridge Deck	F. Copple	Jun-73	Bridge & Special Structures Design
<a href="#">SPR-862</a>	Air Quality Section for the Final Environmental Impact Statement for Proposed I-475	Michigan State Highway Commission	Jun-73	Environmental
<a href="#">SPR-863</a>	Summary of Roadway Luminaire Test Results (1971-72)	G. M. Smith	Jun-73	Systems, Maintenance & Operations
<a href="#">SPR-864</a>	Rest Area Simulation Model	L. E. DeFrain	Jun-73	Tourism
<a href="#">SPR-865</a>	M-99 Logan Street, City of Lansing, Noise Study	M. N. Clyde	Jun-73	Environmental
<a href="#">SPR-866</a>	Failure of Preformed Guy-Grip Dead-Ends Used for Suspending Steel Cable from Poles	M. N. Clyde	Jun-73	Bridge & Special Structures Design
<a href="#">SPR-867</a>	Pull-Out Test Results of Hilti Fastening Systems	M. A. Chiunti	Jun-73	Materials
<a href="#">SPR-868</a>	"Resil-a-Post" Flexible Traffic Guide Post	F. J. Bashore	Jul-73	Materials

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<a href="#">SPR-869</a>	Joint Failures on I-75 North of Flint	L. T. Oehler	Jul-73	Pavement Design & Pavement Performance
<a href="#">SPR-870</a>	Evaluation of Liquid Chemicals for Preventing Ice Formation on Highway Bridge Decks	J. H. DeFoe	Jul-73	Bridge & Special Structures Design
<a href="#">SPR-871</a>	Experimental Patching Concrete Field Application on Test Bridge S01 of 33035 A (WB M-36 Over US-127)	H. L. Patterson	Jul-73	Bridge & Special Structures Design
<a href="#">SPR-872</a>	Evaluation of Six Commercial Fast-Setting Hydraulic Patching Mortars, a Latex Bonding Agent, and an Epoxy Emulsion Admixture	W. K. Kruger, H. L. Patterson	Jul-73	Pavement Design & Pavement Performance
<a href="#">SPR-873</a>	Reflectorization of Fluorescent Flagman Vests	M. H. Janson, G. M. Smith	Jul-73	Systems, Operations & Maintenance
<a href="#">SPR-874</a>	Noise Study for the Final Environmental Impact Statement for Proposed I-475	Michigan State Highway Commission	Jul-73	Environmental
<a href="#">SPR-875</a>	Bridge Deck Construction	C. J. Arnold	Aug-73	Bridge & Special Structures Design
<a href="#">SPR-876</a>	Movement Study of Bridge Piers	C. J. Arnold, M. A. Chiunti	Aug-73	Bridge & Special Structures Design
<a href="#">SPR-877</a>	"Quaker-Klat" Black Bituminous Coating (Quaker State Oil Co.)	A. J. Permoda	Aug-73	Materials
<a href="#">SPR-878</a>	Steel-Fiber-Reinforced Concrete Overlay	C. J. Arnold	Aug-73	Pavement Design & Pavement Performance
<a href="#">SPR-879</a>	Construction and Impact Testing of a Short Section of Experimental Concrete Glare Screen	C. J. Arnold, M. A. Chiunti	Aug-73	Pavement Design & Pavement Performance
<a href="#">SPR-880</a>	Air Quality Section for the Final Environmental Impact Statement for Proposed M-99	Michigan State Highway Commission	Aug-73	Environmental
<a href="#">SPR-881</a>	Corrosion Resistance of Dowel Bats (Organic Coatings)	A. R. Gabel, A. J. Permoda	Aug-73	Materials
<a href="#">SPR-882</a>	Air Quality Section for the Final Environmental Impact Statement for Proposed Northwestern Highway	Michigan State Highway Commission	Aug-73	Environmental
<a href="#">SPR-883</a>	Summaries of Michigan Pavement Skid Resistance, 1972 Test Program	Michigan State Highway Commission	Sep-73	Pavement Design & Pavement Performance
<a href="#">SPR-884</a>	Feasibility of Hearth Slag for Bases	J. H. DeFoe	Sep-73	Materials
<a href="#">SPR-885</a>	A Hot-Mix Asphalt Compaction Demonstration Experiment Comparing Vibratory and Conventional Rollers	C. A. Zapata	Oct-73	Pavement Design & Pavement Performance
<a href="#">SPR-886</a>	Air Quality Section for the Draft Environmental Impact Statement for Proposed I-96	Michigan State Highway Commission	Oct-73	Environmental
<a href="#">SPR-887</a>	Annual Studded Tire Survey, Winter 1972-1973	R. L. Felter, P. M. Schafer	Oct-73	Pavement Design & Pavement Performance
<a href="#">SPR-888</a>	Current Research Laboratory Program	L. T. Oehler	Oct-73	Administration & Management

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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-889</a>	Investigation of Narrow Width Reinforcing Mats and Longer Slabs with Slip-Form Paving	J. E. Simonsen	Oct-73	Pavement Design & Pavement Performance
<a href="#">SPR-890</a>	Traffic Noise Level Predictor Computer Program	G. H. Grove	Oct-73	Systems, Maintenance & Operations
<a href="#">SPR-891</a>	Aluminum-Coated Chain Link Fence	F. J. Bashore	Oct-73	Materials
<a href="#">SPR-892</a>	Automatic Weighting of Vehicles in Motion and Collection of Traffic Data by Electronic Methods	Michigan State Highway Commission	Mar-74	Commercial Vehicle Enforcement
<a href="#">SPR-893</a>	Drainability Analysis of Samples Submitted to the Porous Materials Specification Committee by District Soils Engineers	E. C. Novak, Jr.	Dec-73	Environmental
<a href="#">SPR-894</a>	Investigation of Chemical and Physical Properties of Structural Steel, B03 of 51021-Cooley Bridge, M-55 over Pine River	K. A. Allemeier	May-05	Bridge & Special Structures Design
<a href="#">SPR-895</a>	Faulting of Short Slab Concrete Pavements	C. J. Arnold	Dec-73	Pavement Design & Pavement Performance
<a href="#">SPR-896</a>	Investigation of Structural Tees, Galvanized in Sections in a Truss-Type Pedestrian Bridge	A. J. Permoda	Jan-74	Bridge & Special Structures Design
<a href="#">SPR-897</a>	Legibility Distance of I-69 Reflector Button Legend Signs	G. M. Smith	Jan-74	Transportation Safety
<a href="#">SPR-898</a>	Experimental Concrete and Bituminous Shoulders (Progress Report)	M. A. Chiunti	Feb-74	Geotechnical & Foundataion Design
<a href="#">SPR-899R</a>	Air Quality Report for US-31, Berrien County – <i>Report Revised January 1979 See Report No. SPR-1105</i>	Michigan State Highway Commission	May-76	Environmental
<a href="#">SPR-900</a>	1973 Performance Tests of “Fast-Dry” White and Yellow Pavement Marking Paints	A. J. Permoda	Feb-74	Materials
<a href="#">SPR-901</a>	Final Report on Evaluation of a Rubber Pad Railroad Crossing	J. E. Simonsen	Feb-74	Multi-Modal
<a href="#">SPR-902</a>	Air Quality Report for I-75 Zilwaukee Bridge	Michigan State Highway Commission	Feb-74	Environmental
<a href="#">SPR-903</a>	Study of Glare Due to Parking Lot Lighting on US-127 near M-36, Mason	L. T. Oehler	Feb-74	Transportation Safety
<a href="#">SPR-904</a>	Dow Two-Component Self Leveling Urethane Joint Sealant	F. J. Bashore, A. W. Price	Feb-74	Pavement Design & Pavement Performance
<a href="#">SPR-905</a>	General Evaluation of Current Concrete Pavement Performance in Michigan, Jointed Concrete Pavement Deterioration Considered as a Probability Process	L. F. Holbrook, W.H. Kuo	Mar-74	Pavement Design & Pavement Performance
<a href="#">SPR-906</a>	Air Quality Report for US-24 (Telegraph Rd.), Oakland County	Michigan State Highway Commission	Mar-74	Environmental
<a href="#">SPR-907</a>	Survey and Recommendations Concerning Aluminum Anchor Bolts on Bridge Rails	C. J. Arnold, M. A. Chiunti	Mar-74	Bridge & Special Structures Design
<a href="#">SPR-908</a>	Bulkhead Joints for Concrete Base Shoulders (Progress Report)	C. J. Arnold, M. A. Chiunti	Mar-74	Geotechnical & Foundataion Design

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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-909R</a>	Air Quality Report for M-51 Relocation – Berrien County	Michigan State Highway Commission	Apr-74	Environmental
<a href="#">SPR-910</a>	Evaluation of Load Transfer Assemblies (Progress Report)	J. E. Simonsen	Apr-74	Pavement Design & Pavement Performance
<a href="#">SPR-911</a>	Experimental Joint Spacing Project (Construction Report)	M. A. Chiunti	Apr-74	Pavement Design & Pavement Performance
<a href="#">SPR-912</a>	Specifications for Polyvinylchloride Rumble Strips	L. T. Oehler	May-05	Materials
<a href="#">SPR-913</a>	Field Inspections of One and Two-Stage Joint Sawing Procedures	F. J. Bashore	May-74	Pavement Design & Pavement Performance
<a href="#">SPR-914</a>	An Investigation of the Definition of Frost Heave Textured Material	E. C. Novak, Jr.	May-74	Materials
<a href="#">SPR-915R</a>	Noise Study and Analysis, M-51 City of Niles – Berrien County, Main Street to Pucker Street	G. H. Grove	Jun-74	Environmental
<a href="#">SPR-916</a>	Protective Coatings for Highway Metals	A. J. Permoda, A. R. Gabel	Jun-74	Materials
<a href="#">SPR-917</a>	“StriCel” Highway Stripe Remover from Atlas International, Inc. of Colorado	A. R. Gabel	May-74	Materials
<a href="#">SPR-918</a>	Noise Study and Analysis, City of Pontiac – Oakland County, East Boulevard Extension, South Boulevard to Woodward Ave	M. E. Scarlata	Jun-74	Environmental
<a href="#">SPR-919</a>	Cellex Cellular Concrete for Precast Noise Barriers	K. H. Laaninen	May-74	Materials
<a href="#">SPR-920R</a>	Air Quality Report for Proposed M-29, City of Algonac	Michigan State Highway Commission	May-74	Environmental
<a href="#">SPR-921R</a>	Air Quality Report for M-3 (US-25 BR), Macomb County	Michigan State Highway Commission	Jun-76	Environmental
<a href="#">SPR-922</a>	Noise Study and Analysis, US-131 Big Rapids Northerly to Ashton	M. E. Scarlata	Jun-74	Environmental
<a href="#">SPR-923</a>	In-Place Stabilization of Soil-Aggregate Mixtures with Bituminous Materials (Progress Report)	J. H. DeFoe	Jun-74	Environmental
<a href="#">SPR-924</a>	Evaluation of Resin Core Particle Board as a Sign Backing Material	J. T. Ellis	Jun-74	Materials
<a href="#">SPR-925</a>	Experimental Concrete Pavement Ramps (Progress Report)	M. A. Chiunti	Jun-74	Pavement Design & Pavement Performance
<a href="#">SPR-926</a>	Evaluation of Riding Quality of Sandstone Hot Bituminous Mix	L. T. Oehler	Jun-74	Pavement Design & Pavement Performance
<a href="#">SPR-927</a>	Noise Study and Analysis, Cities of Allen Park, Dearborn Heights, and Taylor – Wayne County, Reconstruction of the I-94 and M-39 Interchange	M. E. Scarlata	Jun-74	Environmental
<a href="#">SPR-928</a>	Lights and Lighting for Hazard Warning and Delineation	G. M. Smith, M. H. Janson	Oct-76	Transportation Safety



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<a href="#">SPR-929</a>	Air Quality Report for Proposed I-69 from I-96 to US-27	Michigan State Highway Commission	Jul-74	Environmental
<a href="#">SPR-930</a>	Study of Bonding Sidewalk and Parapet Concrete to Modified (Water Soluble) Linseed Oil Cured Bridge Deck Pours	S. M. Foster	Jul-74	Bridge & Special Structures Design
<a href="#">SPR-931</a>	Route Location Noise Study and Analysis, M-275 (I-96 and I-696 Northerly to M-59)	M. E. Scarlata	Jul-74	Environmental
<a href="#">SPR-932</a>	Air Quality Report for I-69 From US-27 to Morrice, Clinton and Shiawassee Counties	Michigan State Highway Commission	Jul-74	Environmental
<a href="#">SPR-933</a>	Air Quality Report for US-31 Berrien County North from Indiana Line	Michigan State Highway Commission	Aug-74	Environmental
<a href="#">SPR-934</a>	Annual Studded Tire Survey, Winter 1973-1974	R. L. Felter, P. M. Schafer	Aug-74	Pavement Design & Pavement Performance
<a href="#">SPR-935</a>	Steel Strength Determination – Six Bridges	M. A. Chiunti	Sep-74	Bridge & Special Structures Design
<a href="#">SPR-936</a>	Evaluation of Liquid Ice Control Chemicals Applied to Bridge Decks (Progress Report)	J. H. DeFoe	Sep-74	Bridge & Special Structures Design
<a href="#">SPR-937</a>	Air Quality Report for M-275 From I-96 and I-696 to M-59	Michigan State Highway Commission	Sep-74	Environmental
<a href="#">SPR-938</a>	Field Inspection of Telespar Sign Posts, “Watch for Ice on Bridge,” Type	A. J. Permoda	Sep-74	Bridge & Special Structures Design
<a href="#">SPR-939</a>	The Housel Model for Slope Stability Analysis	J. M. Portigo	Oct-74	Systems, Maintenance & Operations
<a href="#">SPR-940</a>	“Kling-Strip” Highway Striping Remover from Pert Products Company of Detroit	A. J. Permoda, A. R. Gabel	Oct-74	Materials
<a href="#">SPR-941</a>	Noise Study and Analysis, City of Rockwood – Wayne County Reconstruction of the I-75 and North Huron River Drive Interchange	M. E. Scarlata	Oct-74	Environmental
<a href="#">SPR-942</a>	Traffic Noise Level Predictor Computer Program	G. H. Grove	Oct-74	Systems, Maintenance & Operations
<a href="#">SPR-943</a>	Experimental Concrete and Bituminous Shoulders	M. A. Chiunti, K. S. Bancroft	Oct-74	Geotechnical & Foundataion Design
<a href="#">SPR-944</a>	Summaries of Michigan Pavement Skid Resistance, 1973 Test Program	Michigan State Highway Commission	Oct-74	Pavement Design & Pavement Performance
<a href="#">SPR-945</a>	Evaluation of Salvaged Base Course Materials	J. H. DeFoe	Nov-74	Materials
<a href="#">SPR-946</a>	Simplified Technique for Traffic Noise Level Estimation	G. H. Grove, M. E. Scarlata	Dec-74	Environmental
<a href="#">SPR-947</a>	Investigation of Traffic-Induced Vibrations at the Mary Roy Residence, Marine City	M. A. Davison	Dec-74	Environmental
<a href="#">SPR-948</a>	Noise Study and Analysis, M-51 City of Niles – Berrien County, Main Street to Pucker Street	M. E. Scarlata	Dec-74	Environmental

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<a href="#">SPR-949</a>	Pressure-Induced Failures in Jointed Concrete Pavements and a Machine for Installation of Pressure Relief Joints	C. J. Arnold	Dec-74	Pavement Design & Pavement Performance
<a href="#">SPR-950</a>	Upson Laminated Cellulose Fiber Boards for Use as Road-Side Sign Panels	M. A. Chiunti	Dec-74	Materials
<a href="#">SPR-951</a>	Experimental Shoring to Reduce Vibration During Bridge Deck Widening (Progress Report: 9-Year Performance)	C. J. Arnold, M. A. Chiunti, K. S. Bancroft	Jan-75	Bridge & Special Structures Design
<a href="#">SPR-952</a>	Air Quality Report for M-20, Lee Township, Midland County to Indian Street (US-10 BR), City of Midland	Michigan State Highway Commission	Jan-75	Environmental
<a href="#">SPR-953</a>	An Overview of the Roadway Surface-Tire Pattern Interaction Noise System	G. H. Grove	Mar-75	Environmental
<a href="#">SPR-954</a>	Guardrail Wood Post Deterioration	A. R. Gabel, J. L. McKenna	Jan-75	Materials
<a href="#">SPR-955</a>	Investigation of Traffic-Induced Vibrations at 3018 Woodruff Street, Lansing	C. J. Arnold, M. A. Davidson	Jan-75	Environmental
<a href="#">SPR-956</a>	Laboratory Evaluation of "Elastizell" as a Lightweight Fill	R. C. Mainfort	Jan-75	Materials
<a href="#">SPR-957</a>	1974 Performance Tests of "Fast-Dry" White and Yellow Pavement Marking Paints	A. J. Permoda	Feb-75	Materials
<a href="#">SPR-958</a>	Priority Rating for Replacement of Aluminum-Post Bridge Rail	C. J. Arnold, M. A. Chiunti	Mar-75	Bridge & Special Structures Design
<a href="#">SPR-959</a>	Air Quality Report for M-21 in Lapeer and St. Clair Counties	Michigan State Highway Commission	Apr-75	Environmental
<a href="#">SPR-960</a>	Response to I-75 City of Taylor Noise Complaint	K. A. Allemeier	Apr-75	Environmental
<a href="#">SPR-961</a>	Cement Content of Low Strength, Type 1P, Concrete	C. V. Iansiti, H. L. Patterson	Apr-75	Pavement Design & Pavement Performance
<a href="#">SPR-962</a>	Transverse Cracking Reflected Through Asphaltic Concrete Resurfacing	C. A. Zapata	May-75	Pavement Design & Pavement Performance
<a href="#">SPR-963</a>	Development of Soil-Support Values and Coefficients of Relative Strength of Michigan Highway Support Materials	R. C. Mainfort	May-75	Environmental
<a href="#">SPR-964</a>	Michigan's Accident Experience with Glass Bead License Plate Reflectorization	L. F. Holbrook	Jun-75	Transportation Safety
<a href="#">SPR-965R</a>	Air Quality Report for I-69, Charlotte to I-96, Eaton County	Michigan State Highway Commission	Jul-75	Environmental
<a href="#">SPR-966R</a>	Noise Analysis and Noise Abatement Proposals, Interstate Highway I-696 from Lahser Road Easterly to I-75, Oakland County	G. H. Grove	Nov-75	Environmental
<a href="#">SPR-967</a>	Evaluation of Various Bridge Deck Joint Sealing Systems	F. J. Bashore	Aug-75	Bridge & Special Structures Design
<a href="#">SPR-968</a>	Development of Procedures for Replacing Joints in Concrete Pavement	J. E. Simonsen	Aug-75	Pavement Design & Pavement Performance

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<a href="#">SPR-969R</a>	Air Quality Report for the I-94 and M-39 Interchange	Michigan State Highway Commission	Mar-78	Environmental
<a href="#">SPR-970</a>	An Evaluation of Pavement Wear Caused by Perma-T-Gripper Tire Studs	F. Copple	Aug-75	Pavement Design & Pavement Performance
<a href="#">SPR-971</a>	Laboratory Calibration of Nuclear Soil Density-Moisture Gages	J. H. DeFoe	Sep-75	Systems, Maintenance & Operations
<a href="#">SPR-972</a>	Reinforcement of Asphaltic Concrete Overlays with Petromat Fabric	C. A. Zapata, L. M. Bateman	Sep-75	Pavement Design & Pavement Performance
<a href="#">SPR-973</a>	"Pozicon" Fly-Ash Pavement Concrete – Development Work (Second Progress Report)	H. L. Patterson	Nov-75	Pavement Design & Pavement Performance
<a href="#">SPR-974</a>	Experimental Field Application of "Pozicon" Fly Ash in the Median Barrier of I-75 Near the City of Flint	H. J. Patterson	Apr-76	Pavement Design & Pavement Performance
<a href="#">SPR-975</a>	Evaluation of a Model for Predicting Transverse Cracking of Flexible Pavement	E. C. Novak, Jr.	Feb-76	Pavement Design & Pavement Performance
<a href="#">SPR-976</a>	Corrosion Performance of Aluminum Culverts	J. T. Ellis	Nov-75	Geotechnical & Foundation Design
<a href="#">SPR-977</a>	Design of Binder Course Bituminous Concrete Pavement Mixtures	E. C. Novak, Jr.	Oct-75	Pavement Design & Pavement Performance
<a href="#">SPR-978R</a>	Air Quality Report for M-59 from US-23 to Proposed M-275 in Livingston and Oakland Counties	Michigan State Highway Commission	Oct-75	Environmental
<a href="#">SPR-979</a>	Experimental Installation of Chrome-Alloy Steel Dowels	J. E. Simonsen	Oct-75	Materials
<a href="#">SPR-980</a>	Trial Installation of Rumble Strips in Asphalt Shoulders	J. E. Simonsen	Dec-75	Transportation Safety
<a href="#">SPR-981</a>	Evaluation of "Wej-It" and "Taper-Bolt" Expansion Anchors	M. A. Chiunti	Oct-75	Materials
<a href="#">SPR-982</a>	Summaries of Michigan Pavement Skid Resistance, 1974 Test Program	Michigan State Highway Commission	Nov-75	Pavement Design & Pavement Performance
<a href="#">SPR-983</a>	Security Steel Insert and Deflected Locknuts	M. A. Chiunti	Nov-75	Materials
<a href="#">SPR-984</a>	Application for Federal Financial Participation in Traffic Noise Barrier Construction Along a Selected Segment of I-75 in Southeastern Michigan	Michigan State Highway Commission	Nov-75	Environmental
<a href="#">SPR-985</a>	"Improved Alert" Reflective Liquid (Cataphote Corp.) and "B-I-P" Reflective Liquid from Flex-O-Lite Corp.	A. R. Gabel	Jan-76	Materials
<a href="#">SPR-986</a>	Annual Report of Activities of the Michigan Department of State Highways and Transportation Research Laboratory	Michigan State Highway Commission	Jan-76	Administration & Management
<a href="#">SPR-987</a>	Recommended Capacities for Expansion Anchor Lane Ties and Evaluation of Frazer and Jones Concrete Expansion Anchors	M. A. Chiunti	Jan-76	Materials
<a href="#">SPR-988</a>	Reflectorized License Plates and Night Accident Reduction	L. F. Holbrook	Feb-76	Transportation Safety

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<a href="#">SPR-989</a>	Feasibility Study to Convert Regular-Dry Traffic Paint Applicator to Fast-Dry	A. J. Permoda	Feb-76	Materials
<a href="#">SPR-990</a>	Fiberglass Reinforced Pultrusions	M. A. Chiunti	Feb-76	Materials
<a href="#">SPR-991</a>	Subbase Drainage Criteria	F. T. Hsia	Mar-76	Roadway Design
<a href="#">SPR-992</a>	Corridor Air Quality Report for Proposed M-59 – Utica to I-94	Michigan State Highway Commission	Feb-76	Environmental
<a href="#">SPR-993</a>	Strength Comparison Between Water Reducer Concretes of Portland-Pozzolan and Type 1A Cements	H. L. Patterson	Mar-76	Pavement Design & Pavement Performance
<a href="#">SPR-994</a>	Accident Rates and Surface Properties – An Investigation of Relationships	L. R. Holbrook	Oct-76	Pavement Design & Pavement Performance
<a href="#">SPR-995</a>	A Literature Survey of Median Barriers and Highway Safety	L. F. Holbrook, W. H. Kuo	Apr-76	Transportation Safety
<a href="#">SPR-996</a>	Comparative Performance of Contraction Joints on I-75, Saginaw and Genesee Counties	F. Copple	Apr-76	Pavement Design & Pavement Performance
<a href="#">SPR-997</a>	Investigation of Straw Fire Damage to CRCP, I-96 Near Novi (I 63191-03586A)	W. K. Kruger	Apr-76	Pavement Design & Pavement Performance
<a href="#">SPR-998</a>	Petrographic Analysis of Coarse Aggregate: Superior Sand and Gravel Pit, Pit No. 31-45 (Testing Laboratory Sample 75 A-152)	R. W. Muethel	Apr-76	Materials
<a href="#">SPR-999</a>	CMI Autograde Pavement Profiler	F. Copple	May-76	Pavement Design & Pavement Performance
<a href="#">SPR-1000</a>	Petrographic Analysis of Coarse Aggregate: Gogebic Sand and Gravel Co., Pit No. 27-55 (Testing Laboratory Sample 75 A-203)	R. W. Muethel	May-76	Materials
<a href="#">SPR-1001</a>	Development and Evaluation of a Field Drainability Test Method	E. C. Novak, Jr.	Jun-76	Systems, Maintenance & Operations
<a href="#">SPR-1002</a>	Bulkhead Joints for Concrete Base Shoulders (Final Report)	M. A. Chiunti	May-76	Geotechnical & Foundataion Design
<a href="#">SPR-1003</a>	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co., Pit No. 34-4 (Testing Laboratory Sample 75 A-2501)	R. W. Muethel	May-76	Materials
<a href="#">SPR-1004</a>	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co., Pit No. 32-4 (Testing Laboratory Sample 75 A-2500)	R. W. Muethel	May-76	Materials
<a href="#">SPR-1005</a>	Evaluation of Four Organic Resin Binder Systems	H. L. Patterson	Nov-76	Materials
<a href="#">SPR-1006</a>	Petrographic Analysis of Coarse Aggregate: Caspian Lumber Co. #2, Pit No. 36-40 (Testing Laboratory Sample 75 A-291)	R. W. Muethel	Apr-76	Materials
<a href="#">SPR-1007</a>	Petrographic Analysis of Coarse Aggregate: Construction Aggregates Corp., Pit No. 70-9 (Testing Laboratory Sample 75 A-2162)	R. W. Muethel	Apr-76	Materials
<a href="#">SPR-1008</a>	A Review of Bridge Deck Problems, and a Final Report on the Performance of Several Berrien County Structures That Were Widened Under Traffic	C. J. Arnold, M. A. Chiunti, K. S. Bancroft	Jun-76	Bridge & Special Structures Design

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<a href="#">SPR-1009</a>	1975 Performance Tests of "Fast-Dry" White and Yellow Pavement Marking Paints	A. J. Permoda	Jul-76	Materials
<a href="#">SPR-1010</a>	Petrographic Analysis of Coarse Aggregate: Lindberg Pit No. 22-29 (Testing Laboratory Sample 75 A-410)	R. W. Muethel	Jun-76	Materials
<a href="#">SPR-1011</a>	Fracture Toughness and Fatigue Properties of Steel Plate Butt Joints Welded by Submerged Arc and Electroslag Welding Procedures	J. D. Culp	May-76	Pavement Design & Pavement Performance
<a href="#">SPR-1012</a>	Bridge Deck Repair and Development of Procedures for Epoxy Injection Grouting of Bridge Deck Delaminations	H. L. Patterson	Jul-76	Bridge & Special Structures Design
<a href="#">SPR-1013</a>	An Inventory of Traffic Noise Levels Along Limited Access Freeways in Michigan	G. H. Grove, M. E. Scarlata	Sep-76	Environmental
<a href="#">SPR-1014</a>	High-Index, Wet-Performance Glass Beads for Pavement Markings From Potter Brothers	A. J. Permoda	Jul-76	Materials
<a href="#">SPR-1015</a>	"Snow-Glow" Glass Beads for Pavement markings From Snowfast Company of Italy	A. J. Permoda	Jul-76	Materials
<a href="#">SPR-1016</a>	Experimental Short Slab Pavements (Construction Report)	M. A. Chiunti	Aug-76	Pavement Design & Pavement Performance
<a href="#">SPR-1017</a>	Application for Federal Financial Participation in Traffic Noise Barrier Construction Along a Selected Segment of I-75 in the City of Taylor in Southeastern Michigan	Michigan State Highway Commission	Aug-76	Environmental
<a href="#">SPR-1018</a>	Steel Sampling, 76 Structures	C. J. Arnold	Aug-76	Bridge & Special Structures Design
<a href="#">SPR-1019</a>	Expansion Anchor Evaluation, Hilti HDI Anchors	C. J. Arnold	Aug-76	Materials
<a href="#">SPR-1020</a>	Development of Procedures for Replacing Joints in Concrete Pavement, Final Report	J. E. Simonsen	Sep-76	Pavement Design & Pavement Performance
<a href="#">SPR-1021</a>	Reflectorized Flagman Vests	G. M. Smith, M. H. Janson	Sep-76	Systems, Maintenance & Operations
<a href="#">SPR-1022</a>	Effects of Deicing Salts on the Chloride Levels in Water and Soil Adjacent to Roadways	R. W. Muethel	Oct-76	Environmental
<a href="#">SPR-1023</a>	Air Quality Report for Davison Freeway, City of Highland Park, Wayne County	Michigan State Highway Commission	Oct-76	Environmental
<a href="#">SPR-1024</a>	Aggregate Gradation Quality Control	W. H. Kuo	Nov-76	Materials
<a href="#">SPR-1025</a>	Thickness Equivalencies for Asphalt-Treated and Untreated Aggregate Base Course Layers	F. T. Hsia	Nov-76	Materials
<a href="#">SPR-1026R</a>	Air Quality Report for M-99 In Ingham and Clinton Counties	Michigan State Highway Commission	Dec-78	Environmental
<a href="#">SPR-1027</a>	Progress Report on the Evaluation of Various Types of Railroad Crossings	J. E. Simonsen	Nov-76	Multi-Modal
<a href="#">SPR-1028</a>	Study of Deck Concrete in S03 of 64014, US-31 under Winston Road West of Rothbury	M. G. Brown	Nov-76	Pavement Design & Pavement Performance

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<a href="#">SPR-1029</a>	Steel Evaluation of Vehicle-Damaged Structure (S08 of 39022), 38 <sup>th</sup> Street Over I-94 Near Kalamazoo	J. D. Culp	Nov-76	Bridge & Special Structures Design
<a href="#">SPR-1030</a>	Performance Evaluation of Trinidad Asphalt Cement for Bituminous Concrete Resurfacing	C. A. Zapata	Nov-76	Pavement Design & Pavement Performance
<a href="#">SPR-1031</a>	Air Quality Report for the Reconstruction of I-94 BL Southwest of Battle Creek, Calhoun County	Michigan State Highway Commission	Nov-76	Environmental
<a href="#">SPR-1032</a>	Petrographic Analysis of Coarse Aggregate: Gasparido Pit No. 31-65 (Testing Laboratory Sample 75 A-1121)	R. W. Muethel	Dec-76	Materials
<a href="#">SPR-1033</a>	Galvanized Steel Reinforced Concrete Bridge Decks, Progress Report	C. J. Arnold	Dec-76	Bridge & Special Structures Design
<a href="#">SPR-1034</a>	Control and Prevention of Deterioration of Concrete Bridge Decks	M. G. Brown	Dec-76	Bridge & Special Structures Design
<a href="#">SPR-1035</a>	Experimental Concrete and Bituminous Shoulders, Progress Report	K. S. Bancroft	Dec-76	Geotechnical & Foundataion Design
<a href="#">SPR-1036</a>	Petrographic Analysis of Coarse Aggregate: Boyd Pit No. 54-54 (Testing Laboratory Sample 75 A-1625)	R. W. Muethel	Dec-76	Materials
<a href="#">SPR-1037R</a>	Air Quality Report for US-12, City of Dearborn, Wayne County	Michigan State Highway Commission	Mar-79	Environmental
<a href="#">SPR-1038</a>	Determination and Improvement of Relevant Pavement Skid Coefficients	F. Copple, P. T. Luce	Jan-77	Pavement Design & Pavement Performance
<a href="#">SPR-1039</a>	Concrete Arch Rib Condition Survey, M-99 (Logan St.) Over the GRW RR and the Grand River, City of Lansing (X01 of 33011)	H. L. Patterson	Jan-77	Pavement Design & Pavement Performance
<a href="#">SPR-1040</a>	Statistical Analysis of Aggregate Base Course Inspection Using an End Result Aggregate Specification (Sampling, Testing and Acceptance Procedures)	W. H. Kuo	Feb-77	Materials
<a href="#">SPR-1041</a>	Drainage and Foundation Studies for an Experimental Short Slab Pavement	T. M. Green, E. C. Novak, Jr.	Feb-77	Pavement Design & Pavement Performance
<a href="#">SPR-1042</a>	Annual Report of Activities of the Michigan Department of State Highways and Transportation Research Laboratory	Michigan State Highway Commission	Jan-77	Administration & Management
<a href="#">SPR-1043</a>	Edge Marking Criteria from Contrast Ratios	G. M. Smith	Feb-77	Pavement Design & Pavement Performance
<a href="#">SPR-1044</a>	Construction of a Cold-Mix Emulsion Black Base	G. F. Sweeney	Feb-77	Pavement Design & Pavement Performance
<a href="#">SPR-1045</a>	Effectiveness of the Experimental Wooden Noise Wall, Interstate Highway I-75, City of Allen Park, Michigan	G. H. Grove	Feb-77	Environmental
<a href="#">SPR-1046</a>	Comparison Study on the Performance of Bituminous Stabilized Bases (M-66 and M-20)	F. T. Hsia	Feb-77	Pavement Design & Pavement Performance
<a href="#">SPR-1047</a>	Brightness Study and Specification Compliance Survey of Arrow-Bar Traffic Control Signs	J. D. Truax, M. E. Scarlata	Jun-77	Systems, Maintenance & Operations
<a href="#">SPR-1048</a>	Evaluation of Cold-Mix Emulsion Black Base (M-150 and Auburn Road, Oakland County)	J. D. DeFoe	Feb-77	Pavement Design & Pavement Performance

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<a href="#">SPR-1049</a>	Summaries of Michigan Pavement Skid Resistance, 1975 Test Program, MDSHT Report No. 249	Michigan State Highway Commission	Feb-77	Pavement Design & Pavement Performance
<a href="#">SPR-1050</a>	Lincore Ni2 Low Alloy Submerged Arc Welding Wire	J. D. Culp	Mar-77	Materials
<a href="#">SPR-1051</a>	Mixed-in-Place Stabilization of Highway Base Aggregates and Pulverized Bituminous Surfacing Using Asphalt Stabilizers, Final Report	J. H. DeFoe	Mar-77	Materials
<a href="#">SPR-1052</a>	Application for Federal Financial Participation in Traffic Noise Barrier Construction Along Selected Segments of I-275 in Southeastern Michigan	Michigan State Highway Commission	Mar-77	Environmental
<a href="#">SPR-1053</a>	Experimental Lightweight Fill, Construction Report	E. C. Novak, Jr.	Mar-77	Pavement Design & Pavement Performance
<a href="#">SPR-1054</a>	Petrographic Analysis of Coarse Aggregate: American Aggregates Corp. Milford Pit. No. 63-97	R. W. Muethel	Mar-77	Materials
<a href="#">SPR-1055</a>	Petrographic Analysis of Coarse Aggregate: Mickelson No. 3 Pit No. 63-88	R. W. Muethel	Mar-77	Materials
<a href="#">SPR-1056</a>	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Mar-77	Materials
<a href="#">SPR-1057</a>	Evaluation of Five Commercial Fast-Setting Patching Mortars	K. H. Laaninen	Mar-77	Pavement Design & Pavement Performance
<a href="#">SPR-1058</a>	Instruction Manual for Bridge Deck Delamination Detector	Michigan State Highway Commission	Apr-77	Bridge & Special Structures Design
<a href="#">SPR-1059</a>	Petrographic Analysis of Analysis of Coarse Aggregate: Emmons Pit No. 54-22	R. W. Muethel	Apr-77	Materials
<a href="#">SPR-1060</a>	Petrographic Analysis of Coarse Aggregate: Glancy Pit No. 62-3	R. W. Muethel	Apr-77	Materials
<a href="#">SPR-1061</a>	Evaluation of Prewetted Salt for Ice Control, Final Report	J. H. DeFoe	May-77	Materials
<a href="#">SPR-1062</a>	Interim Report on Epoxy Injection Grouting Experimental Repair Procedure	H. L. Patterson	Jul-77	Materials
<a href="#">SPR-1063</a>	Preventive Maintenance of Concrete Pavement - US-127, Progress Report	J. E. Simonsen	Jun-77	Pavement Design & Pavement Performance
<a href="#">SPR-1064</a>	Elastizell Concrete Lightweight Fill Construction (Pine River Bridge, St. Clair)	E. C. Novak, Jr.	Jun-77	Materials
<a href="#">SPR-1065</a>	Maintenance of Neoprene Sealed Concrete Pavements, First Progress Report	J. E. Simonsen, F. J. Bashore, A. W. Price	Jul-77	Pavement Design & Pavement Performance
<a href="#">SPR-1066</a>	Raised Pavement Markers	M. H. Janson, G. W. Smith, J. D. Truax, M. J. Tiedt	Jul-77	Transportation Safety
<a href="#">SPR-1067</a>	Epoxy Resin Coated Reinforcing Steel, Construction and Progress Report	C. J. Arnold	Jun-77	Materials
<a href="#">SPR-1068</a>	An Accident Frequency Prediction Model for Selected State Trunkline Classifications	W. H. Kuo	Dec-77	Roadway Design



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<a href="#">SPR-1069</a>	Fibco 'Mod II' Portable Truck Barrier	J. F. Caudell	Dec-77	Materials
<a href="#">SPR-1070</a>	Petrographic Analysis of Coarse Aggregate: Marblehead Quarry, Marblehead, Ohio	R. W. Muethel	Aug-77	Materials
<a href="#">SPR-1071</a>	Petrographic Analysis of Coarse Aggregate: Pickitt No. 1 Pit No. 34-26	R. W. Muethel	Aug-77	Materials
<a href="#">SPR-1072</a>	A Study of Supplemental Drainage Methods for Preventing Frost Heave in Full Depth Concrete Shoulders	E. C. Novak, Jr.	Sep-77	Geotechnical & Foundataion Design
<a href="#">SPR-1073</a>	Report on Commission Auditor's Recommendations Nos. 25, 27, 28	Michigan State Highway Commission	Aug-77	Administration & Management
<a href="#">SPR-1074</a>	Air Quality Report for M-153 in the Cities of Westland and Garden City, Wayne County	Michigan State Highway Commission	Aug-77	Environmental
<a href="#">SPR-1075</a>	A Validation of the NCHRP 117/144 Traffic Noise Level Predictor Model for Low Density, Close Distance Traffic on I-696 Between I-75 and I-94	G. H. Grove	Nov-77	Environmental
<a href="#">SPR-1076</a>	Evaluation of Nuclear Methods for Measuring Asphalt Content of Bituminous Mixtures	J. H. DeFoe	Dec-77	Systems, Maintenance & Operations
<a href="#">SPR-1077</a>	Low Slump Portland Cement Concrete Bridge Deck Overlays	K. H. Laaninen	Jan-78	Bridge & Special Structures Design
<a href="#">SPR-1078</a>	Evaluation of Sulfur-Asphalt Binder for Bituminous Resurfacing Mixtures, Progress Report	J. H. DeFoe	Jan-78	Materials
<a href="#">SPR-1079</a>	Second Progress Report on the Evaluation of Various Types of Railroad Crossings	J. E. Simonsen	Mar-78	Multi-Modal
<a href="#">SPR-1080</a>	Petrographic Analysis of Coarse Aggregate: Champion , Inc., Moon Lake Pit No. 22-4	R. W. Muethel	Jan-78	Materials
<a href="#">SPR-1081</a>	A Report on the Cause of Deterioration of Sections of Flexible I-94 Pavement	E. C. Novak, Jr.	Feb-78	Pavement Design & Pavement Performance
<a href="#">SPR-1082</a>	Annual Report of Activities of the Michigan Department of State Highways and Transportation Research Laboratory	Michigan State Highway Commission	Feb-78	Administration & Management
<a href="#">SPR-1083</a>	Petrographic Analysis of Coarse Aggregate: Arthur #2 Pit No. 72-5	R. W. Muethel	May-05	Materials
<a href="#">SPR-1084</a>	Petrographic Analysis of Coarse Aggregate: Champion, Inc. Dishneau Pit No. 52-1	R. W. Muethel	May-05	Materials
<a href="#">SPR-1085</a>	Summaries of Michigan Pavement Skid Resistance, 1976 Test Program	Michigan State Highway Commission	Mar-78	Pavement Design & Pavement Performance
<a href="#">SPR-1086</a>	Petrographic Analysis of Coarse Aggregate: U. S. Forest Service Pit No. 27-68	R. W. Muethel	Mar-78	Materials
<a href="#">SPR-1087</a>	Evaluation of Expansion Anchors, Self-Drilling, Torque Type, and Stud-Type	K. S. Bancroft	Apr-78	Materials
<a href="#">SPR-1088</a>	Use of Recycled Asphalt Surface Material in the Construction of a Bituminous Stabilized Base, I-75, Cheboygan County, Construction Report	J. H. DeFoe, G. F. Sweeney	Apr-78	Materials

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<a href="#">SPR-1089</a>	Evaluation of Monoslabs for Paving of Ditches and Service Drives	S. L. Purdy	Apr-78	Pavement Design & Pavement Performance
<a href="#">SPR-1090</a>	Noise Study and Analysis, Cities of Allen Park, Dearborn Heights, and Taylor, Wayne County, Reconstruction of the I-94 and M-39 Interchange (Addendum)	Michigan State Highway Commission	Jun-78	Environmental
<a href="#">SPR-1091</a>	A Computer Program for Computing Probabilities and Generating Random Variates for the Gamma, Normal, and Chi-Square Distributions and Its Applications to Highway Technology	W. H. Kuo	Jul-78	Systems, Maintenance & Operations
<a href="#">SPR-1092</a>	Air Quality Report for I-69 in Ingham, Clinton, and Shiawassee Counties	Michigan State Highway Commission	Jun-78	Environmental
<a href="#">SPR-1093</a>	Petrographic Analysis of Coarse Aggregate: Paquin Gravel Co. #2, Pit No. 21-19	R. W. Muethel	Jun-78	Materials
<a href="#">SPR-1094</a>	A Statistical Analysis of Potential Relationships Between Selected Concrete and Aggregate Properties and Concrete Pavement Performance	W. H. Kuo	Jul-78	Pavement Design & Pavement Performance
<a href="#">SPR-1095</a>	Air Quality Report for Proposed Reconstruction of Interchanges at I-94 and Merriman Road and I-94 and Middle Belt Road	Michigan State Highway Commission	Sep-78	Environmental
<a href="#">SPR-1096</a>	Condition of "Elastizell" Lightweight Concrete Backfills After One Year in Place, First Progress Report	T. M. Green, E. C. Novak, Jr.	Sep-78	Pavement Design & Pavement Performance
<a href="#">SPR-1097</a>	Study of Latex Modified concrete Deterioration on Wiard Road Over US-27 (S04 of 81063)	M. G. Brown	Sep-78	Pavement Design & Pavement Performance
<a href="#">SPR-1098</a>	The Michigan Department of Transportation Circular Wear Track-Results of Preliminary Aggregate Polishing Tests, First Progress Report	R. W. Muethel	Mar-79	Materials
<a href="#">SPR-1099</a>	Air Quality Measurements of Movable Asphalt Plants for Recycling Paving Asphalt	J. T. Ellis	Nov-78	Environmental
<a href="#">SPR-1100</a>	Salt Degradation Study	L. T. Oehler	Nov-78	Materials
<a href="#">SPR-1101</a>	Investigation of Parking Ramp Leakage Through the Upper Level Slab at the Capitol Complex	H. L. Patterson	Dec-78	Pavement Design & Pavement Performance
<a href="#">SPR-1102</a>	Traffic Signal Dimming Methods	J. D. Truax, G. M. Smith, M. H. Janson	Jan-79	Systems, Maintenance & Operations
<a href="#">SPR-1103</a>	Inspection of Low Slump and Latex Modified Overlays on I-94 in the Detroit Area	M. G. Brown	Dec-78	Pavement Design & Pavement Performance
<a href="#">SPR-1104</a>	Air Quality Report for M-51 Relocation – Berrien County	N/A	Jan-79	Environmental
<a href="#">SPR-1105</a>	Air Quality Report for US-31, Berrien County	N/A	Jan-79	Environmental
<a href="#">SPR-1106</a>	A Survey of Median Barriers and Highway Safety	L. F. Holbrook, W. H. Kuo	Jan-79	Transportation Safety
<a href="#">SPR-1107</a>	Evaluation of Sodium Chloride for Stabilizing an Aggregate Base Course (M-28 East of Bruce Crossing, Project No. 00955A)	R. C. Mainfort	Feb-79	Materials
<a href="#">SPR-1108</a>	Stress Measurements and Load Distribution on Selected Portions of the Mackinac Bridge	C. J. Arnold, W. D. Bullen	Oct-79	Bridge & Special Structures Design

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<a href="#">SPR-1109</a>	Summaries of Michigan Pavement Friction Measurements, 1977 Test Program	P. M. Schafer	Apr-79	Pavement Design & Pavement Performance
<a href="#">SPR-1110</a>	Astro Optics Delineators	M. H. Janson	Mar-79	Systems, Maintenance & Operations
<a href="#">SPR-1111</a>	NFS Industries Delineators	M. H. Janson	Mar-79	Systems, Maintenance & Operations
<a href="#">SPR-1112</a>	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	N/A	Mar-79	Administration & Management
<a href="#">SPR-1113</a>	Evaluation of Various Types of Railroad Crossings, Third Progress Report	J. E. Simonsen	Apr-79	Multi-Modal
<a href="#">SPR-1114</a>	A Study to Monitor the Deicing Chemical Pollution Prevention System at the Reed City MDOT Maintenance Garage, Preliminary Report	R. W. Muethel	Apr-79	Environmental
<a href="#">SPR-1115</a>	Performance Evaluation of Non-Reinforced Ramps	L. T. Oehler	Apr-79	Pavement Design & Pavement Performance
<a href="#">SPR-1116</a>	Anti-Glare Screen Median Fence	J. D. Truax, G. M. Smith	May-79	Transportation Safety
<a href="#">SPR-1117</a>	Effectiveness of Infrared Joint Heaters for Bituminous Pavements	J. H. DeFoe	May-79	Pavement Design & Pavement Performance
<a href="#">SPR-1118</a>	A Probability Model for Determining the Safety Benefits of Median Barrier Installations	W. H. Kuo	May-79	Transportation Safety
<a href="#">SPR-1119</a>	Development of Base Layer Thickness Equivalency	S. S. Kuo	Jun-79	Materials
<a href="#">SPR-1120</a>	Continuously Reinforced Concrete Pavement in Michigan, A Historical Summary	J. E. Simonsen	Jun-79	Pavement Design & Pavement Performance
<a href="#">SPR-1121</a>	Evaluation of Various Bridge Deck Joint Sealing Systems, Final Report	F. J. Bashore, D. E. Branch, A. W. Price	Jul-79	Bridge & Special Structures Design
<a href="#">SPR-1122</a>	Effectiveness of Neoprene Seals in Preventing Concrete Pavement Contraction Joint Deterioration	F. J. Bashore, A. W. Price	Jul-79	Pavement Design & Pavement Performance
<a href="#">SPR-1123</a>	Alternate, More Economical Repainting Systems for Bridge Structural Steel, First Progress Report	F. J. Bashore, A. J. Permoda	Jul-79	Bridge & Special Structures Design
<a href="#">SPR-1124</a>	A Study to Evaluate the Performance of Bituminous Wearing Course Containing Sandy Limestone, A Preliminary Report	R. W. Muethel	Jul-79	Pavement Design & Pavement Performance
<a href="#">SPR-1125</a>	Performance Evaluation of Mirafi 140 Fabric as Overlay Reinforcement to Control Reflection Cracking	C. A. Zapata	Jul-79	Materials
<a href="#">SPR-1126</a>	Investigation of Pavement Problems on I-275	Michigan Trans. Commission	Oct-79	Pavement Design & Pavement Performance
<a href="#">SPR-1127</a>	Texturing Existing Concrete Pavement	P. T. Luce	Oct-79	Pavement Design & Pavement Performance
<a href="#">SPR-1128</a>	Investigation of Pavement Heaving on Bridge Approaches, I-275 (I 58171-06463A)	E. C. Novak, Jr.	Oct-79	Bridge & Special Structures Design

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<a href="#">SPR-1129</a>	Evaluation of Sulfur-Asphalt Binder Bituminous Paving Mixtures, Progress Report	J. H. DeFoe	Nov-79	Pavement Design & Pavement Performance
<a href="#">SPR-1130</a>	Application for Federal Financial Participation in Traffic Noise Barrier Construction: The Michigan Statewide Traffic Noise Level Inventory – Group 1	Michigan Trans. Commission	Nov-79	Environmental
<a href="#">SPR-1131</a>	Stimsonite Delineator	G. M. Smith	Dec-79	Systems, Maintenance & Operations
<a href="#">SPR-1132</a>	The Michigan Department of Transportation Circular Wear Track–Results of Supplemental Aggregate Polishing Tests, Interim Progress Report	R. W. Muethel	Jan-80	Materials
<a href="#">SPR-1133</a>	Precisions of the Aggregate Sample Splitter and Testing Method	W. H. Kuo	Nov-80	Materials
<a href="#">SPR-1134</a>	Evaluation of Sprinkle Treatment for Improving Skid Resistance of Asphalt Surfaces, Progress Report	J. H. DeFoe	Jan-80	Pavement Design & Pavement Performance
<a href="#">SPR-1135</a>	Reflectorized Traffic Regulator Vests, Progress Report	M. H. Janson, G. M. Smith, J. D. Truax	Apr-80	Systems, Maintenance & Operations
<a href="#">SPR-1136</a>	Petrographic Analysis of Coarse Aggregate: County Road Commission No. 3, Pit No. 17-62	R. W. Muethel	Feb-80	Materials
<a href="#">SPR-1137</a>	Final Report on Joint Load Transfer Test Road to Evaluate Acme Load Transfer Assemblies, Plastic Coated Dowels and End-of-Pour Construction Joint Assemblies	J. E. Simonsen	Mar-80	Pavement Design & Pavement Performance
<a href="#">SPR-1138</a>	Experimental Evaluation of No-Discharge Recirculation Sewage System for Freeway Rest Areas (On Southbound I-275, North of Monroe)	J. W. Bastian, G. Horton, Jr., C. A. Zapata	Mar-80	Tourism
<a href="#">SPR-1139</a>	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-80	Administration & Management
<a href="#">SPR-1140</a>	Summaries of Michigan Pavement Friction Measurements (1978 Test Program)	P. M. Schafer	Mar-80	Pavement Design & Pavement Performance
<a href="#">SPR-1141</a>	Preventive Maintenance of Concrete Pavements – US-27, Final Report	J. E. Simonsen	Apr-80	Pavement Design & Pavement Performance
<a href="#">SPR-1142</a>	Interim Report on Effects of Corrosion on Bridges of Unpainted A588 Steel and Painted Steel Types	J. D. Culp, G. L. Tinklenberg	Jun-80	Bridge & Special Structures Design
<a href="#">SPR-1143</a>	Investigation of Popout Problems on M-14	L. T. Oehler	May-80	Pavement Design & Pavement Performance
<a href="#">SPR-1144</a>	Determination of Allowable Movement Ratings for Various Proprietary Bridge Deck Expansion Joint Devices at Various Skew Angles	F. J. Bashore, A. W. Price, D. E. Branch	May-80	Bridge & Special Structures Design
<a href="#">SPR-1145</a>	Evaluation of Various Types of Railroad Crossings, Fourth Progress Report	J. E. Simonsen	May-80	Multi-Modal
<a href="#">SPR-1146</a>	Blended Aggregates Tested on the Michigan Department of Transportation Circular Wear Track	R. W. Muethel	May-80	Materials
<a href="#">SPR-1147</a>	Evaluation of 22A Gradation Open Hearth Slag as a Base and Subbase Construction Material, Final Report	J. H. DeFoe	May-80	Materials
<a href="#">SPR-1148</a>	Air Quality Report for the Ambassador Bridge Tourist Information Center	Michigan Trans. Commission	Jul-80	Environmental

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<a href="#">SPR-1149</a>	Petrographic Analysis and Insoluble Residue Determination of Coarse Aggregate: Thornton Quarry, Pit No. 21-67	R. W. Muethel	Jul-80	Materials
<a href="#">SPR-1150</a>	Performance Evaluation of Trinidad Asphalt Cement for Bituminous Concrete Resurfacing, Final Report	C. A. Zapata	Jul-80	Pavement Design & Pavement Performance
<a href="#">SPR-1151</a>	Performance of Several Types of Corrosion Resistant Load Transfer Bars, for as Much as 21 Years of Service in Concrete Pavements	C. J. Arnold	Aug-80	Pavement Design & Pavement Performance
<a href="#">SPR-1152</a>	Base and Subbase Properties Affecting Longitudinal Cracking of I-275	Michigan Trans. Commission	Apr-81	Pavement Design & Pavement Performance
<a href="#">SPR-1153</a>	Air Quality Report for M-59 in Macomb County	Michigan Trans. Commission	Sep-80	Environmental
<a href="#">SPR-1154</a>	Screened Legend Quality of Signs from Michigan State Industries and a Review of Screening Materials	M. H. Janson	Sep-80	Materials
<a href="#">SPR-1155</a>	Weathering Steel Guardrail – A Materials Performance Evaluation	R. L. McCrum, C. J. Arnold	Nov-80	Materials
<a href="#">SPR-1156</a>	Study of Cores for Potential Recycled Concrete Pavement	R. W. Muethel	Mar-81	Pavement Design & Pavement Performance
<a href="#">SPR-1157</a>	Air Quality Measurements of Moveable Asphalt Plants for Recycled Paving Asphalt, Progress Report	J. T. Ellis	Nov-80	Environmental
<a href="#">SPR-1158</a>	The Relationship of Aggregate Durability to Concrete Pavement Performance, and the Associated Effects of Base Drainability	C. J. Arnold	Jan-81	Materials
<a href="#">SPR-1159</a>	Petrographic Analysis of Coarse Aggregate: Salem Gr. Construction Co. Pit No. 63-56	R. W. Muethel	Jan-81	Materials
<a href="#">SPR-1160</a>	Evaluation of Cold-Mix Emulsion Black Base at the Secondary Complex, Final Report	L. T. Oehler	Feb-81	Pavement Design & Pavement Performance
<a href="#">SPR-1161</a>	Weatherability of Map Displays	Michigan Trans. Commission	Feb-81	Tourism
<a href="#">SPR-1162</a>	Airport Beacon L-801A Photometric Test	Michigan Trans. Commission	Mar-81	Multi-Modal
<a href="#">SPR-1163</a>	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-81	Administration & Management
<a href="#">SPR-1164</a>	Evaluation of Timber Piles from Fort Street Bridge	C. J. Arnold, M. A. Chiunti	Mar-81	Bridge & Special Structures Design
<a href="#">SPR-1165</a>	Simplified Technique for Traffic Noise Level Estimation	F. W. Harwood, M. E. Scarlata	Apr-81	Environmental
<a href="#">SPR-1166</a>	Air Quality Report for M-275 in Oakland County	Michigan Trans. Commission	Apr-81	Environmental
<a href="#">SPR-1167</a>	American Decal Reflective Sheeting	M. H. Janson	Apr-81	Materials
<a href="#">SPR-1168</a>	Field Evaluation of 3M and American Decal Reflective Signing Materials	J. D. Truax, G. M. Smith, M. H. Janson	May-81	Materials

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<a href="#">SPR-1169</a>	Jointed Concrete Pavements-Design, Performance and Repair	C. J. Arnold, M. A. Chiunti, K. S. Bancroft	May-81	Pavement Design & Pavement Performance
<a href="#">SPR-1170</a>	Summaries of Michigan Pavement Friction Measurements (1979 Test Program)	P. M. Schafer	May-81	Pavement Design & Pavement Performance
<a href="#">SPR-1171</a>	Concrete Pavement Performance Problems and Foundation Investigation of I-75 from the Ohio Line Northerly to the Huron River	J. E. Simonsen, E. C. Novak, Jr.	May-81	Pavement Design & Pavement Performance
<a href="#">SPR-1172</a>	Petrographic Analysis of Coarse Aggregate Extracted from Bituminous Pavement Cores, M-55, Control Section No. 83021, 16035A	R. W. Muethel	Jun-81	Materials
<a href="#">SPR-1173</a>	Surface Texture Measurements by the Putty Impression Method	C. A. Zapata	Jun-81	Pavement Design & Pavement Performance
<a href="#">SPR-1174</a>	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Jun-81	Materials
<a href="#">SPR-1175</a>	An Inventory of Traffic Noise Levels Along Limited Access Freeways in Michigan (Revision of Research Report R-1013A)	M. E. Scarlata, F. W. Harwood	Jul-81	Environmental
<a href="#">SPR-1175A</a>	An Inventory of Traffic Noise Levels Along Limited Access Freeways in Michigan – Appendices C and D	M. E. Scarlata, F. W. Harwood	Jul-81	Environmental
<a href="#">SPR-1176</a>	Petrographic Analysis of Crushed Stone Coarse Aggregate: Michigan Foundation Pit No. 82-6	R. W. Muethel	Jul-81	Materials
<a href="#">SPR-1177</a>	Airport Beacon L-801A Photometric Test	Michigan Trans. Commission	Aug-81	Multi-Modal
<a href="#">SPR-1178</a>	A Study of Seasonal Variation in Pavement Conditions by Means of Benkelman Beam Deflection and Frost Depth Measurements	R. C. Mainfort	Aug-81	Pavement Design & Pavement Performance
<a href="#">SPR-1179</a>	PCC Pavement Joint Restoration and Rehabilitation (Federal Highway Administration NEEP Project 27) (Construction Report)	J. E. Simonsen, F. J. Bashore, A. W. Price	Aug-81	Pavement Design & Pavement Performance
<a href="#">SPR-1180</a>	Fasign Reflective Sheeting	M. H. Janson	Dec-81	Materials
<a href="#">SPR-1181</a>	Kiwalite Reflective Sheeting	M. H. Janson	Sep-81	Materials
<a href="#">SPR-1182</a>	Air Quality Measurements of Moveable Asphalt Plants for Recycling Paving Asphalt (Interim Report for 1981)	J. T. Ellis	Nov-81	Environmental
<a href="#">SPR-1183</a>	Evaluation of 'Monoslabs' for Paving Ditches and Service Drives (Final Report)	J. H. DeFoe	Nov-81	Pavement Design & Pavement Performance
<a href="#">SPR-1184</a>	Implementation of Modern Statistical Methods for Improving the Accuracy of Highway Laboratory and Field Data, A Manual	W. H. Kuo	Mar-82	Planning
<a href="#">SPR-1185</a>	A Five-Year Evaluation of Preventive Maintenance Concepts on Jointed Concrete Pavement (I-75 and I-696 in Oakland County)	C. J. Arnold, M. A. Chiunti, K. S. Bancroft	Feb-82	Pavement Design & Pavement Performance
<a href="#">SPR-1186</a>	Petrographic Analysis of Crushed Gravel Coarse Aggregate: Lindberg #3 Pit No. 52-9 and Co. Road Comm. #12 Pit No. 52-67 Combined	R. W. Muethel	Jan-82	Materials
<a href="#">SPR-1187</a>	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-82	Administration & Management

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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-1188</a>	Degradation of Steel Furnace Slag as an Open Graded Base Course for Concrete Pavement	E. C. Novak, Jr.	Feb-82	Materials
<a href="#">SPR-1189</a>	Evaluation of Sulphlex as a Binder in Pavement Resurfacing Mixtures, Progress Report	J. H. DeFoe	Feb-82	Materials
<a href="#">SPR-1190</a>	Petrographic Analysis of Combined Crushed and Natural Gravel Coarse Aggregate: M.Glancy Pit No. 60-29	R. W. Muethel	Mar-82	Materials
<a href="#">SPR-1191</a>	Early Cracking of a Bituminous Concrete Section of US-2 Located in District 2	E. C. Novak, Jr.	Apr-82	Pavement Design & Pavement Performance
<a href="#">SPR-1192</a>	Petrographic Analysis of Crushed Stone Coarse Aggregate: Gogebic Range Ski Corp. Pit No. 27-74	R. W. Muethel	Mar-82	Materials
<a href="#">SPR-1193</a>	Evaluation of Various Types of Railroad Crossings, Fifth Progress Report	J. E. Simonsen	Apr-82	Multi-Modal
<a href="#">SPR-1194</a>	Frost Heave Investigation of I-275	E. C. Novak, Jr.	Apr-82	Pavement Design & Pavement Performance
<a href="#">SPR-1195</a>	Evaluation of Wet Bottom Slag Bituminous Wearing Course, I-94 in Dearborn Heights, Final Report	G. M. Smith	May-82	Pavement Design & Pavement Performance
<i>SPR-1196</i>	<i>A Study to Monitor the Deicing Chemical Pollution Prevention System at the Reed City MDOT Maintenance Garage - No Report</i>	<i>R. W. Muethel</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1197</a>	Static and Dynamic Properties of Anchor Bolts for Sign Supports	C. J. Arnold, D. F. Johnson, M. A. Chiunti	Jun-82	Materials
<a href="#">SPR-1198</a>	Concrete Pavement Cracking, Interim Report	R. L. Felter	Jun-82	Pavement Design & Pavement Performance
<a href="#">SPR-1199</a>	Post-Construction Air Quality Monitoring for M-99 in Lansing	Michigan Trans. Commission	Jul-82	Environmental
<a href="#">SPR-1200</a>	Evaluation of Slurry Seal Surface Treatment for Application on the Mackinac Bridge	R. L. Felter, J. E. Norton	Jul-82	Bridge & Special Structures Design
<a href="#">SPR-1201</a>	Evaluation of ClaPak and ClaSet as Soil stabilizing Agents	R. C. Mainfort, J. H. DeFoe	Jul-82	Environmental
<a href="#">SPR-1202</a>	Evaluation of Noise Barriers on I-275 for Structural and Visual Integrity (I-96/I-275 Interchange, Northeast Quadrant and I-275 from Kippnick Rd. to Edw. Hines Dr.)	F. W. Harwood, K. S. Bancroft	Jul-82	Environmental
<a href="#">SPR-1203</a>	Further Evaluation of Black Base and Aggregate Base Construction ( M-20 and M-66)	R. C. Mainfort	Aug-82	Materials
<a href="#">SPR-1204</a>	Use of Deflection Basin Characteristics for Flexible Pavement Analysis and Overlay Design	J. H. DeFoe	Sep-82	Systems, Maintenance & Operations
<a href="#">SPR-1205</a>	ASTM E501 Test Tire Correlation, B. F. Goodrich vs. McCreary	P. T. Luce	Nov-82	Materials
<a href="#">SPR-1206</a>	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Nov-82	Materials
<a href="#">SPR-1207</a>	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Nov-82	Materials



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<a href="#">SPR-1208</a>	Degradation of Acid-Treated and Untreated Steel Furnace Slag as an Open Graded Base Course for Concrete Pavement	E. C. Novak, Jr.	Apr-83	Pavement Design & Pavement Performance
<a href="#">SPR-1209</a>	Use of Recycled Asphalt Material in the Construction of a Bituminous Stabilized Base, I-75, Cheboygan County	J. H. DeFoe	Nov-82	Materials
<a href="#">SPR-1210</a>	Evaluation of the Straight Line Gradation Chart and the Particle Index Test	Michigan Trans. Commission	Apr-82	Materials
<a href="#">SPR-1211</a>	Infiltration of Subbase Sand into Open Graded Drainage Course (OGDC) Bases	E. C. Novak, Jr.	Apr-83	Materials
<a href="#">SPR-1212</a>	Alternate Repainting Systems for Bridge Structural Steel	F. J. Bashore	Mar-83	Bridge & Special Structures Design
<a href="#">SPR-1213</a>	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-83	Administration & Management
<a href="#">SPR-1214</a>	Air Quality Measurements for Movable Asphalt Plants for Recycling Paving Asphalt	J. T. Ellis	Mar-83	Environmental
<a href="#">SPR-1215</a>	Revenue Service Brake Lining Temperature Measurements for a Retarder Equipped Bus	L. E. DeFrain	Mar-83	Materials
<a href="#">SPR-1216</a>	Investigation of Steel Furnace Slag Open Graded Drainage Course Base on I-69 Airport Road Ramps	Michigan Trans. Commission	Mar-83	Pavement Design & Pavement Performance
<a href="#">SPR-1217</a>	Benkelman Beam Testing of Shoulder and Pavement Recycling Projects	J. H. DeFoe	Mar-83	Geotechnical & Foundation Design
<a href="#">SPR-1218</a>	In-Place 22A Aggregate Acceptance Sampling Procedures	W. H. Kuo	Apr-83	Materials
<i>SPR-1219</i>	<i>Reflectorized Traffic Flagger's Vest – No Report</i>	<i>G. M. Smith</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1220</a>	Evaluation of Sulfur-Asphalt Binder for Bituminous Resurfacing Mixtures	J. H. DeFoe	May-83	Pavement Design & Pavement Performance
<a href="#">SPR-1221</a>	Evaluation of Breakaway Cable Terminal Endings on Guardrail	B. W. Ness	May-83	Transportation Safety
<a href="#">SPR-1222</a>	Evaluation of Various Types of Railroad Crossings, Sixth Progress Report	J. E. Simonsen	May-83	Multi-Modal
<a href="#">SPR-1223</a>	Evaluation of Sprinkle Treatment for Improving Skid Resistance of Asphalt Surfaces, Final Report	J. H. DeFoe	May-83	Pavement Design & Pavement Performance
<a href="#">SPR-1224</a>	Evaluation of 'Enkamat' as an Aid to Stabilizing a Cut Slope, Final Report	J. H. DeFoe	Jun-83	Materials
<i>SPR-1225</i>	<i>An Analytical Survey Procedure for Flexible Pavements – No Report</i>	<i>Michigan Trans. Commission</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1226</a>	Stabilized Fly Ash as Lightweight Fill	Michigan Trans. Commission	Jun-83	Materials
<a href="#">SPR-1227</a>	High Density Concrete Deck Overlay with Superplasticizer	M. G. Brown	Jun-83	Pavement Design & Pavement Performance

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<a href="#">SPR-1228</a>	The Michigan Department of Transportation Circular Wear Track--Results of Supplemental Aggregate Polishing Tests, Interim Progress Report	R. W. Muethel	Apr-84	Materials
<a href="#">SPR-1229</a>	Scan 16 – Moisture, Frost, Ice Early Warning System, First Progress Report	F. M. Spica	Apr-84	Systems, Maintenance & Operations
<a href="#">SPR-1230</a>	Determination of Mean Vehicle Noise Emission Levels in Michigan	F. W. Harwood, K. S. Bancroft, R. J. Holcom	Jul-83	Environmental
<a href="#">SPR-1231</a>	Evaluation of Cast-in-Place Joint Repairs in Concrete Pavement	C. A. Zapata	Jul-83	Pavement Design & Pavement Performance
<a href="#">SPR-1231B</a>	Evaluation of Cast-in-Place Joint Repairs in Concrete Pavement	C. A. Zapata	Jul-83	Pavement Design & Pavement Performance
<a href="#">SPR-1232</a>	An Aggregate Wear Index Reduction Factor for Uncrushed Material in Gravel, Summary Report	R. W. Muethel	Jul-83	Materials
<a href="#">SPR-1233</a>	Load Carrying Capacity of I-75 Bituminous Shoulders in the Flint Area	Michigan Trans. Commission	Jul-83	Geotechnical & Foundataion Design
<a href="#">SPR-1234</a>	Petrographic Analysis of Coarse Aggregate: Michigan Stone Co. Pit No. 58-3	R. W. Muethel	Jul-83	Materials
<a href="#">SPR-1235</a>	PCC Pavement Joint Restoration and Rehabilitation (Federal Highway Administration NEEP Project 27) Construction Report	J. E. Simonsen, F. J. Bashore, A. W. Price	Oct-83	Pavement Design & Pavement Performance
<i>SPR-1236</i>	<i>Possible Sites for Utilizing Excess Soil from I-696, Lahser Road to I-75 to Provide Noise Barriers – No Report</i>	<i>F. W. Harwood, R. J. Holcom</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1237</a>	Performance Evaluation of an Experimental Slurry Seal Emission as Filler or Deteriorated Longitudinal Joints in Concrete Pavement Being Prepared for Asphaltic Concrete Resurfacing	C. A. Zapata, D. L. Andrews, L. J. Pearson	Oct-83	Pavement Design & Pavement Performance
<a href="#">SPR-1238</a>	Comparison of Aggregate and Bituminous Treated Bases I-75 South of Grayling	R. C. Mainfort, E. C. Novak, Jr.	Mar-84	Materials
<a href="#">SPR-1239</a>	Evaluation of Sulphlex as a Binder in Pavement Resurfacing Mixtures, Final Report	J. H. DeFoe	Mar-84	Materials
<a href="#">SPR-1240</a>	Petrographic Analysis of Dense-Graded Gravel Aggregate: Butkovich #2 Pit No. 49-74	R. W. Muethel	Mar-84	Materials
<a href="#">SPR-1240(1)</a>	Petrographic Analysis of Dense-Graded Gravel Aggregate: Garfield #2 Pit No. 49-104	R. W. Muethel	Mar-84	Materials
<a href="#">SPR-1240(2)</a>	Petrographic Analysis of Dense-Graded Gravel Aggregate: Ozanich Pit No. 49-97	R. W. Muethel	Mar-84	Materials
<a href="#">SPR-1240(3)</a>	Petrographic Analysis of Dense-Graded Gravel Aggregate: Peters Pit No. 49-23	R. W. Muethel	Mar-84	Materials
<a href="#">SPR-1240(4)</a>	Petrographic Analysis of Dense-Graded Gravel Aggregate: DNR Pit. No. 49-101	R. W. Muethel	Mar-84	Materials
<a href="#">SPR-1241</a>	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-84	Administration & Management
<a href="#">SPR-1242</a>	Field Trial of Continuous Asphalt Concrete Density Monitoring Devices, Final Report	J. H. DeFoe	Mar-84	Pavement Design & Pavement Performance

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<a href="#">SPR-1243</a>	Performance Evaluation of Plastic Fabrics as Overlay Reinforcement to Control Reflection Cracking	C. A. Zapata, M. A. Chiunti, L. J. Pearson	Apr-84	Pavement Design & Pavement Performance
<a href="#">SPR-1244</a>	Evaluation of Various Types of Railroad Crossings, Seventh Progress Report	J. E. Simonsen	Apr-84	Multi-Modal
<a href="#">SPR-1245</a>	Determination of Allowable Movement Ratings for Various Proprietary Bridge Deck Expansion Joint Devices at Various Skew Angles – Second Testing Series	F. J. Bashore, A. W. Price, D. E. Branch	May-84	Bridge & Special Structures Design
<a href="#">SPR-1246</a>	Air Monitoring in the Vicinity of I-475 in the City of Flint	Michigan Trans. Commission	May-84	Environmental
<a href="#">SPR-1247</a>	Flexible Delineator Posts	B. W. Ness	Jun-84	Systems, Maintenance & Operations
<a href="#">SPR-1248</a>	Evaluation of Calcium Magnesium Acetate as an Ice Control Agent, Final Report	J. H. DeFoe	Jun-84	Materials
<a href="#">SPR-1249</a>	Evaluation of Glare Screen	B. W. Ness, C. J. Arnold, M. A. Chiunti	Aug-84	Transportation Safety
<a href="#">SPR-1250</a>	Monitoring Movement of the Zilwaukee Bridge	B. W. Ness	Jan-85	Bridge & Special Structures Design
<a href="#">SPR-1251</a>	Field Trial of Foamed Asphalt Stabilization, Final Report	Michigan Trans. Commission	Oct-84	Materials
<a href="#">SPR-1252</a>	Scan 16 – Moisture, Frost, Ice Early Warning System, Final Report	F. M. Spica	Oct-84	Systems, Maintenance & Operations
<a href="#">SPR-1253</a>	An Examination of Studies Which Investigate the Question of Accident Reduction Through Full License Plate ReflectORIZATION	L. F. Holbrook	Oct-84	Transportation Safety
<a href="#">SPR-1254</a>	Investigation of Low Stability Bituminous Base Course US-131 Mecosta County (FF 54014-17762A), Final Report	J. H. DeFoe	Nov-84	Pavement Design & Pavement Performance
<a href="#">SPR-1255</a>	Current Status Report, Effects of Corrosion on Unpainted Weathering Steel Bridges	R. L. McCrum, C. J. Arnold, R. P. Dexter	Feb-85	Bridge & Special Structures Design
<a href="#">SPR-1256</a>	1976-1982 Performance Tests of “Fast Dry” White and Yellow Pavement Marking Paints	F. J. Bashore	Jan-85	Materials
<a href="#">SPR-1257</a>	Cost and Energy Considerations Involved in the Recycling of Portland Cement Concrete	F. Copple	Jun-86	Materials
<a href="#">SPR-1258</a>	Evaluation of Calcium Magnesium Acetate (CMA) as a Deicing Agent: Corrosion Phase – A Comparative Evaluation of the Effects of CMA vs. Salt (NaCl) on Highway Metals (3-Month Exposure)	R. McCrum, J. W. Reincke, J. W. Lay	Mar-85	Materials
<a href="#">SPR-1259</a>	Improved Joint Sealant Materials for Concrete Pavements, Construction Report	J. W. Simonsen, A. W. Price	Feb-85	Pavement Design & Pavement Performance
<a href="#">SPR-1260</a>	Solar Hot Water Systems in Michigan Rest Areas, Interim Report	F. W. Harwood, R. Holcom	May-85	Tourism
<a href="#">SPR-1261</a>	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Apr-85	Administration & Management
<a href="#">SPR-1262</a>	Performance Evaluation of Concrete Pavement Overlays (Construction Report)	J. E. Simonsen, A. W. Price	May-85	Pavement Design & Pavement Performance

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<a href="#">SPR-1263</a>	Reflectorized Traffic Regulator Vest	G. M. Smith	Aug-85	Systems, Maintenance & Operations
<i>SPR-1264</i>	<i>Reducing Sodium Chloride Usage for Ice Control on Michigan Highways – No Report</i>	<i>J. H. DeFoe</i>	<i>N/A</i>	<i>Not Available</i>
<i>SPR-1265</i>	<i>Report to the Salt Task Force on Salt Usage and Accident Incidence – No Report</i>	<i>L. F. Holbrook</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1266</a>	Evaluation of Ground and Reclaimed Tire Rubber in Bituminous Resurfacing Mixtures	J. H. DeFoe	Oct-85	Materials
<a href="#">SPR-1267</a>	Restoration and Preventive Maintenance of Concrete Pavements	J. E. Simonsen, A. W. Price	Oct-85	Pavement Design & Pavement Performance
<a href="#">SPR-1268</a>	Experimental Settling and Skimming Chamber for I-69 Storm Sewer	Michigan Trans. Commission	Nov-85	Bridge & Special Structures Design
<a href="#">SPR-1269</a>	Evaluation of Silane Treated Glass Beads in Polyester Pavement Marking Paint	F. J. Bashore, A.W. Price	Feb-86	Materials
<a href="#">SPR-1270</a>	Evaluation of Serviced Flex Lok Filler for Pressure Relief Joints, Final Report	F. J. Bashore, A. W. Price, D. E. Branch	Mar-86	Pavement Design & Pavement Performance
<a href="#">SPR-1271</a>	Experimental Concrete and Bituminous Shoulders, Interim Report	V. T. Barnhart	Mar-85	Geotechnical & Foundataion Design
<a href="#">SPR-1272</a>	Investigation of the Field Coating of Environmentally Exposed Weathering Steel, Interim Report	G. L. Tinklenberg	Feb-86	Bridge & Special Structures Design
<a href="#">SPR-1273</a>	Polishing Resistance of Arenaceous Limestone from the Bayport Bedrock Formation	R. W. Muethel	Apr-86	Materials
<a href="#">SPR-1274</a>	Use of Boni Fibers on M-99 in Lansing, Final Report	J. H. DeFoe	Jul-86	Pavement Design & Pavement Performance
<a href="#">SPR-1275</a>	The Development of Michigan's Bridge Painting Specification	G. L. Tinklenberg	Jul-86	Bridge & Special Structures Design
<a href="#">SPR-1276</a>	A Study to Evaluate the Performance of Bituminous Wearing Course Containing Sandy Limestone, Final Report	R. W. Muethel	Aug-86	Pavement Design & Pavement Performance
<a href="#">SPR-1277</a>	Evaluation of Weathering Steel in a Detroit Freeway Environment, Second Eight-Year Study	G. L. Tinklenberg	Aug-86	Bridge & Special Structures Design
<i>SPR-1278</i>	<i>Evaluation of Bridge Deck Expansion Joints - FHWA Experimental Project #5 - No Report</i>	<i>A. W. Price, J. E. Simonsen</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1279</a>	Effects of Deicing Salts on the Chloride Levels in Water and Soil Adjacent to Roadways, Interim Progress Report	R. W. Muethel	Oct-86	Environmental
<a href="#">SPR-1280</a>	Bridge Barrier Rail-to-Guardrail Anchoring System	L. J. Pearson	Oct-86	Bridge & Special Structures Design
<a href="#">SPR-1281</a>	Evaluation of Lime, Fly Ash Base Course Mixtures – Construction Report	V. T. Barnhart	Jan-87	Materials
<a href="#">SPR-1282</a>	Experimental Resurfacing of Concrete Bridge Decks with Microsilica Modified Concrete, Initial Report	H. L. Patterson	Apr-87	Bridge & Special Structures Design

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<a href="#">SPR-1283</a>	Static and Dynamic Properties of Anchor Bolts for Sign Supports, Final Report	B. R. Lower, L. J. Pearson	Jun-87	Materials
<a href="#">SPR-1284</a>	Bridge Girder Butt Welds – Resistance to Brittle Fracture, Fatigue and Corrosion	J. D. Culp	Jan-88	Bridge & Special Structures Design
<a href="#">SPR-1285</a>	Load Tests of the Zilwaukee Bridge, Final Report	S. R. Kulkarni	Nov-87	Bridge & Special Structures Design
<a href="#">SPR-1286</a>	Development of Test for Calcium Carbonate Precipitation in Aggregates	R. W. Muethel	Oct-87	Materials
<i>SPR-1287</i>	<i>A Comparison of Environmental and Load Effects on Portland Cement Concrete Pavements – No Report</i>	<i>L. K. Heinig</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1288</a>	Investigation of Bituminous Compaction Requirements for Cold Weather Paving, Final Report	J. H. DeFoe	Dec-87	Pavement Design & Pavement Performance
<a href="#">SPR-1289</a>	Evaluation of Boschung Ice Early Warning System	F. Spica	Mar-88	Systems, Maintenance & Operations
<a href="#">SPR-1290</a>	Solar Hot Water Systems in Michigan Rest Areas, Second Report	F. Harwood, R. Holcom	Mar-88	Tourism
<a href="#">SPR-1291</a>	Investigation of Steel Beam Guardrail Chemistries	C. J. Arnold, L. J. Pearson	May-88	Materials
<a href="#">SPR-1292</a>	Concrete Pavement Restoration – Construction Report	J. E. Simonsen, A. W. Price	Sep-88	Pavement Design & Pavement Performance
<a href="#">SPR-1293</a>	Comparison of Cracked and Uncracked Flexible Pavements in Michigan, Final Report	J. H. DeFoe	Oct-88	Pavement Design & Pavement Performance
<a href="#">SPR-1294</a>	Low-Slump High-Density Concrete Bridge Deck Overlay	J. E. Simonsen	Oct-88	Bridge & Special Structures Design
<a href="#">SPR-1295</a>	Corrosion Evaluation of Calcium Magnesium Acetate (CMA), Salt (NaCl), and CMA/Salt Solutions	R. L. McCrum	Dec-88	Materials
<a href="#">SPR-1296</a>	Evaluation of Improved Calcium Magnesium Acetate as an Ice Control Agent, Final Report	J. H. DeFoe	Jan-89	Materials
<a href="#">SPR-1297</a>	Calcium Carbonate Precipitate From Crushed Concrete	R. W. Muethel	Mar-89	Materials
<a href="#">SPR-1298</a>	PCC Pavement Joint Restoration and Rehabilitation (FHWA NEEP Project 27), Final Report	J. E. Simonsen, A. W. Price	Jun-89	Pavement Design & Pavement Performance
<a href="#">SPR-1299</a>	Battery Operated Strobelights	G. M. Smith	Mar-89	Systems, Maintenance & Operations
<a href="#">SPR-1300</a>	Field Evaluation of Experimental Fabrics to Prevent Reflective Cracking in Bituminous Resurfacing, Final Report	V. T. Barnhart	Jul-89	Pavement Design & Pavement Performance
<a href="#">SPR-1301</a>	Freeze-Thaw Evaluation of Selected Rock Types from a Composite Sample of Michigan Gravel	R. W. Muethel	Aug-89	Materials
<a href="#">SPR-1302</a>	Inspection of Sign Support Structures	S. Jadun	Sep-89	Bridge & Special Structures Design

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<a href="#">SPR-1303</a>	Performance Evaluation of Concrete Pavement Overlays, Final Report	J. E. Simonsen, A. W. Price	Dec-89	Pavement Design & Pavement Performance
<a href="#">SPR-1304</a>	Legibility and Visibility of Retroreflective Sign Materials	R. E. Nordlund, D. C. Long, G. M. Smith, V. C. Andrews	Jan-90	Materials
<a href="#">SPR-1305</a>	Evaluation of "Glasgrid" Bituminous Pavement Reinforcement	V. T. Barnhart	Mar-90	Pavement Design & Pavement Performance
<a href="#">SPR-1306</a>	Evaluation of MDOT Maintenance Division Seal Coat Projects, Final Report	V. T. Barnhart	Jun-90	Materials
<a href="#">SPR-1307</a>	Evaluation of Tensar Bituminous Pavement Reinforcement, Final Report	J. H. DeFoe	Oct-90	Pavement Design & Pavement Performance
<a href="#">SPR-1308</a>	Evaluation of Ice Detection and Weather Information Systems, Progress Report	J. H. DeFoe, M. H. Close	Dec-90	Systems, Maintenance & Operations
<a href="#">SPR-1309</a>	An Evaluation of A Highway Advisory Radio System in Rest Areas, I-94, Calhoun, Berrien and Van Buren Counties	L. DeFrain, J. Foran, F. Harwood	Apr-91	Tourism
<a href="#">SPR-1310</a>	Evaluation of Lime, Fly Ash Base Course Mixtures, Final Report	V. T. Barnhart	Jun-91	Materials
<a href="#">SPR-1311</a>	Freeze-Thaw Durability and Pore Characteristics of the Major Rock Constituents in Glacial Gravel	R. W. Muethel	Jul-92	Materials
<a href="#">SPR-1312</a>	Fine Aggregates Tested on the Michigan Department of Transportation Circular Wear Track	R. W. Muethel	Jul-91	Materials
<a href="#">SPR-1313</a>	Evaluation of United Salt's Corrosion Inhibitor Intended for Use with Sodium Chloride Deicing Salt	R. L. McCrum, J. V. Heffernan	Sep-91	Materials
<a href="#">SPR-1314</a>	Determination of the Slip Coefficient for Organic and Inorganic Primers in Bolted Connections	B. R. Lower	Sep-91	Materials
<a href="#">SPR-1315</a>	Corrosion and Alternate Deicers, Interim Report	R. L. McCrum	Oct-91	Materials
<a href="#">SPR-1316</a>	Evaluation of Ice Detection and Highway Weather Information Services, Final Report	J. H. DeFoe	Mar-92	Systems, Maintenance & Operations
<a href="#">SPR-1317</a>	Alleged Damage to Susan Shilander's House Due to Traffic-Induced Vibrations	E. Quiroga	Jan-92	Environmental
<a href="#">SPR-1318</a>	The Lightweight Pavement Profile Instrument Development and Applications	J. R. Darlington	Jun-92	Systems, Maintenance & Operations
<a href="#">SPR-1319</a>	Cantilever Sign Structure Inspection, Final Report	B. W. Ness, R. D. Till	Aug-92	Bridge & Special Structures Design
<a href="#">SPR-1320</a>	Evaluation of Simulated Bridge Deck Slabs Using Uncoated, Galvanized, and Epoxy Coated Reinforcing Steel	R. L. McCrum	Feb-93	Bridge & Special Structures Design
<a href="#">SPR-1321</a>	A Comparison of the Corrosion Performance of Uncoated, Galvanized, and Epoxy Coated Reinforcing Steel in Concrete Bridge Decks	R. L. McCrum, R. R. Lower, C. J. Arnold	Mar-95	Bridge & Special Structures Design
<a href="#">SPR-1322</a>	Effects of Deicing Salts on the Chloride Levels in Water and Soil Adjacent to Roadways, Interim Progress Report	R. W. Muethel	Mar-93	Environmental

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<a href="#">SPR-1323</a>	Development of an Instrumented Vehicle to Measure Roadway Curve and Grade	L. E. DeFrain, R. D. Miller, J. R. Darlington	Apr-93	Systems, Maintenance & Operations
<a href="#">SPR-1324</a>	Evaluation of Experimental Painting of A588 Steel Bridges	E. M. Phifer	Aug-93	Bridge & Special Structures Design
<a href="#">SPR-1325</a>	Evaluating Low Dusting Abrasives on the Bridge Carrying Covert Road Over US-127	E. M. Phifer	May-93	Bridge & Special Structures Design
<a href="#">SPR-1326</a>	Interior Vehicle Noise From Shoulder Rumble Strips	F. Harwood, R. Holcomb	Sep-93	Environmental
<a href="#">SPR-1327</a>	Concrete Pavement Restoration, Final Report	D. E. Branch	Jan-95	Pavement Design & Pavement Performance
<a href="#">SPR-1328</a>	Evaluation of the Delamination of the Polyurethane Topcoat	D. C. Long	Feb-94	Materials
<i>SPR-1329</i>	<i>The Influence of Crushed Material on the Strength and Stability of Bituminous Mixtures – No Report</i>	<i>J. H. DeFoe</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1330</a>	The Relationship Between Torque, Tension, and Nut Rotation of Large Diameter Anchor Bolts	R. D. Till, N. A. Lefke	Oct-94	Materials
<a href="#">SPR-1331</a>	Advance Warning Arrow Panel Evaluation	D. J. Rogers, V. C. Andrews, R. E. Nordlund	Feb-95	Systems, Maintenance & Operations
<a href="#">SPR-1332</a>	Investigation of the Air Content of Plastic vs. Hardened Concrete	R. W. Muethel	Feb-95	Pavement Design & Pavement Performance
<a href="#">SPR-1333</a>	Construction of European Concrete Pavement on Northbound I-75 – Detroit, Michigan	J. A. Weinfurter, D. L. Smiley, R. D. Till	Sep-94	Pavement Design & Pavement Performance
<a href="#">SPR-1334</a>	Evaluation of Glasgrid Bituminous Pavement Reinforcement Mesh and a Bituminous Separation Course With and Without Latex	V. T. Barnhart	Oct-95	Pavement Design & Pavement Performance
<a href="#">SPR-1335</a>	Evaluation of Galvanized Pedestrian Bridges	D. C. Long, E. M. Phifer	May-95	Bridge & Special Structures Design
<a href="#">SPR-1336</a>	Proof Load Test of R01 of 61131 M-37 over CSX Railroad, South of Bailey, Michigan	D. A. Juntunen, M. C. Isola	Oct-95	Multi-Modal
<i>SPR-1337</i>	<i>Michigan's SMA Project on M-52 – No Report</i>	<i>E. Quiroga</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1338</a>	First Year Performance of the European Concrete Pavement on Northbound I-75, Detroit, MI	D. Smiley	Feb-95	Pavement Design & Pavement Performance
<i>SPR-1339</i>	<i>The Distortion Induced Fatigue Cracking of Non-Redundant Structures – No Report</i>	<i>L. J. Pearson</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1340</a>	Evaluation of the Urettek Method for Pavement Undersealing	W. H. Opland, V. T. Barnhart	Aug-95	Pavement Design & Pavement Performance
<a href="#">SPR-1341</a>	Inspection and Performance Evaluation of Prefabricated Drainage System	V. T. Barnhart	Oct-98	Bridge & Special Structures Design
<a href="#">SPR-1342</a>	Inspection and Repair of High-Mast Luminaires (HML)	M. C. Isola, R. L. McCrum	Aug-96	Systems, Maintenance & Operations



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<a href="#">SPR-1343</a>	Second Year Performance of The European Concrete Pavement on Northbound I-75, Detroit, Michigan	D. L. Smiley	Jun-96	Pavement Design & Pavement Performance
<a href="#">SPR-1343B</a>	Third Year Performance of European Concrete Pavement on Northbound I-75, Detroit, Michigan	MDOT	Mar-97	Pavement Design & Pavement Performance
<a href="#">SPR-1344</a>	Effect of Elevated Temperature on Fracture Critical Steel Members	R. D. Till	Jul-96	Bridge & Special Structures Design
<a href="#">SPR-1345</a>	Adoption of a Rapid Test for Determining Aggregate Durability in Portland Cement Concrete	U of M	Jun-96	Materials
<a href="#">SPR-1346</a>	Cause of Concrete Pier Cap Deterioration on the I-75 Bridge over River Rouge (B01 of 82194) in Detroit and Effectiveness of Repair Methods	U of M	Sep-96	Bridge & Special Structures Design
<a href="#">SPR-1347</a>	Load Testing of Bridges	A. S. Nowak, V. K. Saraf	Oct-96	Bridge & Special Structures Design
<a href="#">SPR-1348</a>	Investigation of Condition of Prestressed Concrete Bridges in Michigan	D. E. Needham, D. A. Juntunen	Jan-97	Bridge & Special Structures Design
<a href="#">SPR-1349</a>	Instruction of Concrete T-Beam Bridge During Deck Replacement Partello Road over I-94 Structure No. S04 of 1383	D. A. Juntunen, P. W. Wessel	Feb-97	Bridge & Special Structures Design
<a href="#">SPR-1350</a>	Development of a Mobile System for Measuring Traffic Sign Retroreflectivity	R. E. Nordlund, D. C. Long	Aug-98	Systems, Maintenance & Operations
<a href="#">SPR-1351</a>	Investigation of Precast Deck Panels Used in Spread Box Beam Bridges	R. D. Till, D. E. Needham	Apr-97	Bridge & Special Structures Design
<a href="#">SPR-1352</a>	Performance Evaluation of Isotropic Bridge Decks (Ontario Design), Interim Report	D. E. Needham	May-97	Bridge & Special Structures Design
<a href="#">SPR-1353</a>	Investigation of Calcium Hydroxide Depletion as a Cause of Concrete Pavement Deterioration	R. W. Muethel	Nov-97	Pavement Design & Pavement Performance
<i>SPR-1354</i>	<i>No Report</i>			
<a href="#">SPR-1355</a>	Glued-On Fiber Reinforced Plastic (FRP) Sheets for Repair and Rehabilitation	MDOT & U of M	Aug-97	Materials
<a href="#">SPR-1356</a>	Bituminous Crack Filling Test Section on US-10 Near Evert	M. J. Eacker, A. R. Bennett	Apr-98	Pavement Design & Pavement Performance
<a href="#">SPR-1357</a>	Comparison of Methods Used to Produce Hot-Dipped Galvanized W-Beam Guardrail	R. D. Till, C. Davis	Jan-98	Materials
<a href="#">SPR-1358</a>	Study of Michigan's Link Plate and Pin Assemblies	D. A. Juntunen	Apr-98	Bridge & Special Structures Design
<a href="#">SPR-1359</a>	Bituminous Pavement Resurfacing at Snowmobile Crossings First Year Review	T. D. Miller	Mar-98	Pavement Design & Pavement Performance
<a href="#">SPR-1360</a>	Polymers in Bituminous Mixtures – Phase II	M. C. Hawley, L. T. Drzal, G. Baladi, Y. J. Lee	Aug-97	Materials
<a href="#">SPR-1361</a>	Design Procedures for Concrete Anchors (Mechanical Expansion and Bonded Anchors)	D. Needham, D. A. Juntunen	Jun-98	Materials

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<a href="#">SPR-1362</a>	Development of a Guide for Evaluation of Existing Bridges Part I	A. S. Nowak, S. Kim	May-98	Asset Management
<a href="#">SPR-1363</a>	Test Method to Determine the Existence of Segregation in Bituminous Mixtures	T. F. Wolff, G.Y. Baladi, C. M. Chang	Sep-97	Pavement Design & Pavement Performance
<a href="#">SPR-1364</a>	Implementing Superpave in Michigan	Pvmt Mgmt Services	Jun-05	Pavement Design & Pavement Performance
SPR-1365	Research of Elastomeric Concretes for Surface Patching of Pavements at Snowmobile Trail Road Crossings	MTU	Aug-98	Multi-Modal
<i>SPR-1366</i>	<i>No Report</i>			
<a href="#">SPR-1367</a>	Monitoring Both Short & Long Term Mechanical Properties for Large Stone Mixtures	MSU	Oct-98	Materials
<a href="#">SPR-1368</a>	Comparison of Standard and Deep Bridge Deck Overlay Performances	B. D. Beck	Feb-99	Bridge & Special Structures Design
<a href="#">SPR-1369</a>	Bridge Engineering: Synthesis of Planning, Design, Construction, Maintenance, Materials and Research	U of M	Dec-98	Asset Management
<a href="#">SPR-1370</a>	Field Inspection of Traffic Signal Strain Poles	D. A. Juntunen, M. Isola, P. Wessel	May-99	Systems, Maintenance & Operations
<i>SPR-1371</i>	<i>No Report</i>			
<a href="#">SPR-1372</a>	Repair and Strengthening of Reinforced Concrete Beams Using CFRP Laminates	T. Gillespie	Apr-99	Bridge & Special Structures Design
<a href="#">SPR-1373</a>	Prestressed Concrete Beam End Repair	D. Needham	Oct-99	Bridge & Special Structures Design
<a href="#">SPR-1374</a>	Study of Michigan's Continuous Span Variable Depth T-Beam Bridges	D. Juntunen	Jun-00	Bridge & Special Structures Design
<i>SPR-1375</i>	<i>No Report</i>			
<a href="#">SPR-1376</a>	Evaluation of Various Concrete Pavement Joint Sealants	M. Eacker, A. Bennett	May-00	Pavement Design & Pavement Performance
<i>SPR-1377</i>	<i>No Report</i>			
<a href="#">SPR-1378</a>	Development of a Guide for Evaluation of Existing Bridges, Phase 2	U of M	Jan-00	Asset Management
<i>SPR-1379</i>	<i>No Report</i>			
<a href="#">SPR-1380</a>	Prestressed Concrete Beam End Report	D. E. Needham	Jan-00	Bridge & Special Structures Design
<a href="#">SPR-1381</a>	Cost Effectiveness of European Demonstration Project: I-75 Detroit	N. Buch, R. Lyles, L. Becker	May-00	Pavement Design & Pavement Performance

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<a href="#">SPR-1382</a>	Repair and Strengthening of Reinforced Concrete Beams Using CFRP Laminates	M. del Mar Lopez, A. Naaman	Jun-00	Bridge & Special Structures Design
<i>SPR-1383</i>	<i>No Report</i>			
<a href="#">SPR-1384</a>	Electrochemical Chloride Extraction	S. Kahl	Feb-01	Materials
<i>SPR-1385</i>	<i>No Report</i>			
<a href="#">SPR-1386</a>	Repair of Corrosion-Damaged Columns Using FRP Wraps	MSU	Dec-00	Bridge & Special Structures Design
<a href="#">SPR-1387</a>	Whitetopping Project on M-46 Between Carsonville and Port Sanilac	M. Eacker	Oct-00	Pavement Design & Pavement Performance
<a href="#">SPR-1388</a>	Load Test of the Bridge on Old US-27 over Holden Creek in Clinton County (B02 – 19031)	U of M	Nov-00	Bridge & Special Structures Design
<a href="#">SPR-1389A</a>	Development of the Procedure for Efficient Evaluation of Bridge Decks	U of M	Nov-00	Asset Management
<a href="#">SPR-1389B</a>	Michigan Deck Evaluation Guide	U of M & MDOT	Nov-00	Asset Management
<a href="#">SPR-1390</a>	Inspection of Pavement Problems on I-275 and on I-75 from the Ohio Line Northerly to the Huron River	V. T. Barnhart	Feb-01	Pavement Design & Pavement Performance
<a href="#">SPR-1391</a>	Investigation of Prestressed Box Beam Plaza Structures Z01, Z02, and Z03 of 63102 over I-696 in Southfield, Michigan	D. Needham, R. Till	Feb-01	Pavement Design & Pavement Performance
<a href="#">SPR-1392</a>	Non Metallic Reinforcement of Concrete Bridge Decks	MSU	Jan-01	Bridge & Special Structures Design
<a href="#">SPR-1393</a>	Verification of Girder Distribution Factors for Steel Girder Bridges	U of M	May-01	Bridge & Special Structures Design
<a href="#">SPR-1394</a>	Evaluation of Minimum Surface Preparation Coatings for Bridge Painting	B. Beck	May-01	Bridge & Special Structures Design
<a href="#">SPR--1395</a>	Evaluation of Alignment Tolerances for Dowel Bars and their Effects on Joint Performance	MSU	Jun-01	Pavement Design & Pavement Performance
<a href="#">SPR-1396</a>	Development of Roughness Thresholds for the Preventive Maintenance of Pavements based on Dynamic Loading Considerations and Damage Analysis – Volume I and Volume II	MSU	Jun-01	Pavement Design & Pavement Performance
<a href="#">SPR-1397</a>	Analysis of the Bridge Barrier Railing Barrier Railing, Type 5; and Bridge Railing, Aesthetic Parapet Tube.	R. D. Till	Jul-01	Bridge & Special Structures Design
<a href="#">SPR-1398A</a>	Crash Testing of Michigan's Type B (W-Beam) Guardrail System	Univ. of Nebraska – Lincoln	Nov-99	Materials
<a href="#">SPR-1398B</a>	Crash Testing of Michigan's Type B (W-Beam) Guardrail System – Phase II	Univ. of Nebraska – Lincoln	Dec-00	Materials
<a href="#">SPR-1399</a>	Concrete Mix Design, Process Manual	G. Grove	Aug-98	Materials

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<a href="#">SPR-1400</a>	Field Evaluation of Experimental Low VOC Bridge Paints	B. D. Beck	Jul-02	Bridge & Special Structures Design
<a href="#">SPR-1401</a>	Investigation of Transverse Cracking on Michigan PCC Pavements over Open-Graded Drainage Courses	U of M	Nov-98	Pavement Design & Pavement Performance
<a href="#">SPR-1401-Appendices</a>	Investigation of Transverse Cracking on Michigan PCC Pavements over Open-Graded Drainage Courses	U of M	Nov-98	Pavement Design & Pavement Performance
<i>SPR-1402</i>	<i>Michigan Intelligent Transportation Systems Infrastructure: Structural Evaluation and Inspection Procedures – No Report</i>	<i>A. Gilani, D. A. Juntunen, L. Pearson</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1403</a>	Evaluation of Concrete Permeability by Ultrasonic Testing Techniques	WSU	Jan-01	Bridge & Special Structures Design
<a href="#">SPR-1404</a>	Transverse Crack Propagation of JPCP as Related to PCC Toughness	U of M	Aug-01	Pavement Design & Pavement Performance
<a href="#">SPR-1405</a>	Construction Project Scheduling at MDOT	MTU	Dec-99	Construction
<a href="#">SPR-1406</a>	A Comparative Bond Study of Stainless Steel Reinforcement in Concrete	MTU	Jan-02	Bridge & Special Structures Design
<i>SPR-1407</i>	<i>No Report</i>			
<a href="#">SPR-1408</a>	A-588 Bridge Mounted Sign Failure Investigation	D. Juntunen	Jan-00	Bridge & Special Structures Design
<a href="#">SPR-1409</a>	Synthesis and Review of Superpave Implementation	MTU	Mar-02	Pavement Design & Pavement Performance
<a href="#">SPR-1410</a>	Development of Laboratory Performance Test Procedures and Trial Specifications for Hot Mix Asphalt, Final Report	MTU	Oct-04	Materials
<a href="#">SPR-1411</a>	Development and Evaluation of the Lane Merge Traffic Control System at Construction Work Zones	WSU	Dec-01	Construction
<a href="#">SPR-1412 A</a>	Investigation of Steel Box Girder Pier Caps on S05 of 63103	R. Till	Jun-02	Bridge & Special Structures Design
<a href="#">SPR-1412</a>	Causes and Cures for Prestressed Concrete I-Beam End Deterioration	MTU & WSU	Aug-02	Pavement Design & Pavement Performance
<a href="#">SPR-1413</a>	Investigation of the Adequacy of Current Bridge Design Loads in the State of Michigan	MTU & WSU	Jul-02	Asset Management
<i>SPR-1414</i>	<i>Performance Evaluation of Adhesive Anchors Under Sustained Loading – No Report</i>	<i>A. Gilani, P. Jansson</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1415</a>	Evaluation of the Dynamics of Fracture Characteristics of Aggregate in PCC Pavement	S. Vitton, G. Dewey, G. Subhash	Dec-02	Materials
<a href="#">SPR-1416</a>	Identify Causes for Under Performing Rubblized Concrete Pavement Projects; Volume I and Volume II	MSU	Aug-02	Pavement Design & Pavement Performance
<a href="#">SPR-1416-Appendices</a>	Identify Causes for Under Performing Rubblized Concrete Pavement Projects; Volume I and Volume II	MSU	Aug-02	Pavement Design & Pavement Performance

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<a href="#">SPR-1417</a>	Three Year Evaluation of Whitetopping Project on M-46	M. J. Eacker	Feb-02	Pavement Design & Pavement Performance
<a href="#">SPR-1418</a>	Agricultural By-Products for Anti-icing and Deicing Use in Michigan	S. Kahl	Dec-02	Materials
<a href="#">SPR-1419</a>	Work Item Production Rates for MDOT Projects	MTU	Jun-02	Planning
<a href="#">SPR-1420</a>	A Comparison of MDOT Schedules as a Result of Special Provision for Progress Schedule FUSP102G	MTU	Jun-02	Planning
<a href="#">SPR-1421</a>	Detecting and Quantifying Segregation in Bituminous Pavements and Relating its Effect Condition; Final Report and Appendix E	MSU	Mar-02	Pavement Design & Pavement Performance
<a href="#">SPR-1421-Appendices</a>	Detecting and Quantifying Segregation in Bituminous Pavements and Relating its Effect Condition; Final Report and Appendix E	MSU	Mar-02	Pavement Design & Pavement Performance
<a href="#">SPR-1422</a>	Field Performance of Polymer Bridge Deck Overlays in Michigan	MTU	Jan-03	Bridge & Special Structures Design
<a href="#">SPR-1423</a>	Concrete Surface Texture Study	R. Muethel, T. Miller	May-04	Pavement Design & Pavement Performance
<a href="#">SPR-1424</a>	Criteria and Benefits of Penetrating Sealants for Concrete Bridge Deck	WSU	Dec-02	Bridge & Special Structures Design
<a href="#">SPR-1425</a>	A Study of Materials-Related-Distress (MRD) in Michigan's PCC Pavements – Phase 2	MTU & MSU	Dec-02	Pavement Design & Pavement Performance
<a href="#">SPR-1425-Appendices</a>	A Study of Materials-Related-Distress (MRD) in Michigan's PCC Pavements – Phase 2	MTU & MSU	Dec-02	Pavement Design & Pavement Performance
<a href="#">SPR-1426</a>	Mechanistic Design Implementation Plan for Flexible Pavements and Overlays	MSU	Nov-97	Pavement Design & Pavement Performance
<a href="#">SPR-1427</a>	Factors Affecting the Deterioration of Transverse Cracks in JRCP	MSU	Mar-95	Pavement Design & Pavement Performance
<a href="#">SPR-1428</a>	Research Annual Report FY 00, 01, 02	T&R Section	Mar-03	Administration & Management
<a href="#">SPR-1429</a>	Verification of Girder Distribution Factors for Continuous Steel Girder Bridges	U of M	May-03	Bridge & Special Structures Design
<a href="#">SPR-1430</a>	Analytical Design Procedures and Load Rating for Isotropic Bridge Decks	U of M	May-03	Asset Management
<a href="#">SPR-1431</a>	Perpetual Pavement Demonstration Project on US-24 in Detroit	T. Hynes, M. Eacker, K. Bancroft	Apr-04	Pavement Design & Pavement Performance
<i>SPR-1432</i>	<i>Aggregate Research Documentation Services – Phase 1- No Report – See SPR-1442</i>	<i>G. Grove, S. G. Research Services</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1433A</a>	Effect of Truck Loading on Bridges	U of M	Dec-94	Bridge & Special Structures Design
<a href="#">SPR-1433B</a>	Truck Loads on Selected Bridges in the Detroit Area	U of M	Dec-94	Bridge & Special Structures Design

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<a href="#">SPR-1434</a>	Analysis of Bystander Noise Generated by Vehicle/Road Surface Interaction	MTU	May-03	Environmental
<a href="#">SPR-1435</a>	Sensors to Monitor Bond in Concrete Bridges Rehabilitated with FRP	MSU	Oct-03	Bridge & Special Structures Design
<a href="#">SPR-1436</a>	Development of Alternative Pavement Distress Index Models	MSU	Nov-03	Pavement Design & Pavement Performance
<a href="#">SPR-1437</a>	Investigative Causes and Develop Methods to Minimize Early-Age Deck Cracking on Michigan Bridge Decks	WSU	Dec-03	Bridge & Special Structures Design
<a href="#">SPR-1438</a>	Durable Link Slabs for Jointless Bridge Decks Based on Strain-Hardening Cementitious Composites	U of M	Nov-03	Bridge & Special Structures Design
<i>SPR-1439</i>	<i>Safety Performance Evaluation of Michigan's Temporary Traffic Control Devices – No Report</i>	<i>U Nebraska-Lincoln</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1440</a>	Determining the Causes of Top-Down Cracks in Bituminous Pavements	MSU	Aug-03	Pavement Design & Pavement Performance
<a href="#">SPR-1441</a>	A Preliminary Mechanistic Evaluation of PCC Cross-Sections Using ISLAB2000 – A Parametric Study	MSU & MTU	Aug-04	Pavement Design & Pavement Performance
<a href="#">SPR-1442</a>	The Evolution and Application of MDOT Aggregate Specifications	G. Grove	Sep-04	Materials
<a href="#">SPR-1443</a>	Petrographic Evaluation of Cores from the Mosel Avenue Bridge	MTU	Mar-04	Bridge & Special Structures Design
<a href="#">SPR-1444</a>	Preliminary Investigation of the Role of Bacteria in Concrete Degradation	MTU	Apr-04	Pavement Design & Pavement Performance
<a href="#">SPR-1445</a>	Causes and Cures for Cracking of Concrete Barriers – MTU Study	MTU	Apr-04	Materials
<a href="#">SPR-1445-Appendix</a>	Causes and Cures for Cracking of Concrete Barriers – MTU Study	MTU	Apr-04	Materials
<a href="#">SPR-1446</a>	Safety Performance Evaluation of Michigan's 4x5 Portable Sign Support	U Nebraska-Lincoln	Jun-03	Transportation Safety
<i>SPR-1447</i>	<i>No Report</i>			
<a href="#">SPR-1448</a>	Causes and Cures for Cracking of Concrete Barriers – WSU Study	WSU	Aug-04	Materials
<a href="#">SPR-1449</a>	Report on the Risk Assessment of the I-196 Interstate Section Located over the former Domtar Mine, Grand Rapids	MTU	Mar-04	Pavement Design & Pavement Performance
<a href="#">SPR-1450</a>	Development of a Computer Program for Dynamic Back Calculation of Flexible Pavement Layer Moduli	MSU	Jun-04	Systems, Maintenance & Operations
<a href="#">SPR-1451</a>	Development and Evaluation of an Advanced Dynamic Lane Merge Traffic Control System for 3 to 2 Lane Transition Areas in Work Zones	WSU	Jan-04	Systems, Maintenance & Operations
<a href="#">SPR-1452</a>	Freeze-Thaw Evaluation of Large Coarse Aggregate Using MDOT's Confined and Unconfined Methods	U of M	Sep-04	Materials

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<i>SPR-1453</i>	<i>Qualify Transverse Cracking in PCC Pavement from Loss of Slab-Base Contact – No Report</i>	<i>U of M</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1454</a>	Development of Steel Beam End Deterioration Guidelines	MTU	Jan-05	Bridge & Special Structures Design
<a href="#">SPR-1455</a>	Inspection and Deterioration of Bridge Decks Constructed Using Stay-in-Place Metal Forms and Epoxy-Coated Reinforcement	LTU	Oct-04	Bridge & Special Structures Design
<a href="#">SPR-1456</a>	Premature Deterioration in Michigan Jointed Concrete Pavements on Open Graded Drainage Courses Draft Report	U of M & MTU	Nov-97	Pavement Design & Pavement Performance
<a href="#">SPR-1456-Appendices</a>	Premature Deterioration in Michigan Jointed Concrete Pavements on Open Graded Drainage Courses Draft Report	U of M & MTU	Nov-97	Pavement Design & Pavement Performance
<a href="#">SPR-1457</a>	Uses of Recycled Concrete in Michigan	U of M	Nov-95	Pavement Design & Pavement Performance
<a href="#">SPR-1457A</a>	Determine the Impact of the AASHTO LRFD Bridge Code and Transition the Department into the Use of the AASHTO LRFD Design Code	U of M	Sep-04	Asset Management
<a href="#">SPR-1458</a>	Research Annual Reports, FY00-01; FY02-03; FY04	S. Kulkarni, N. Crider	Dec-04	Administration & Management
<a href="#">SPR-1459 Vol I</a>	Mineral Characterization and Cataloging of Quarried Aggregate Sources Used in Michigan Highway Construction	MTU	Jan-05	Materials
<a href="#">SPR-1459 Vol II</a>	Mineral Characterization and Cataloging of Quarried Aggregate Sources Used in Michigan Highway Construction	MTU	Jan-05	Materials
<a href="#">SPR-1459-Appendix</a>	Mineral Characterization and Cataloging of Quarried Aggregate Sources Used in Michigan Highway Construction	MTU	Jan-05	Materials
<i>SPR-1460</i>	<i>No Report</i>			
<i>SPR-1461</i>	<i>Effect of Michigan Multi-Axle Trucks on Pavement Distress, Phase I – See SPR-1504</i>	<i>MSU</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1462</a>	European Concrete Pavement Tour	R. Till, R. Van Portfliet	Nov-92	Pavement Design & Pavement Performance
<a href="#">SPR-1463</a>	Specifications for European Concrete Pavement	Demo Project	Aug-93	Pavement Design & Pavement Performance
<a href="#">SPR-1464</a>	Report on the 1992 U.S. Tour of European Concrete Highways	AASHTO / FHWA	Jun-05	Pavement Design & Pavement Performance
<a href="#">SPR-1465</a>	Unbonded Concrete Overlay Demonstration Project on I-75 in Ogemaw County – Construction Report	M. Eacker, A. Bennett	Jun-05	Pavement Design & Pavement Performance
<a href="#">SPR-1466</a>	LRFD Load Calibration for State of Michigan Trunkline Bridges	WSU, CSI & MDOT	Aug-06	Bridge & Special Structures Design
<a href="#">SPR-1467</a>	Field Test of Variable Speed Limits in Work Zones in Michigan	MSU	Sep-03	Systems, Maintenance & Operations
<a href="#">SPR-1468</a>	Development of a Pavement Marking Management System	MSU	Dec-04	Systems, Maintenance & Operations



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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-1469</a>	Multi-State Coarse Aggregate Freeze Thaw Comparison	T. B. Woodhouse	Jul-05	Materials
<i>SPR-1470</i>	<i>Condition Assessment and Methods of Abatement of Prestressed Concrete Box Beam Deterioration – See SPR-1527</i>	<i>MTU</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1471</a>	Field Demonstration of Durable Link Slabs for Jointless Bridge Decks Based on Strain-Hardening Cementitious Composites	U of M	Dec-05	Bridge & Special Structures Design
<a href="#">SPR-1472</a>	A Study of the Effectiveness of the Use of Steady Burn Warning Lights on Drums in Construction Work Zones	WSU	Jun-05	Systems, Maintenance & Operations
<a href="#">SPR-1473</a>	Analysis of the Benefits of Bulk Pre-Wetting Solid Salt with Several Different Liquids	MTU	Jan-06	Materials
<a href="#">SPR-1474</a>	Investigation of Breakaway Light Standards	S. Kahl, R. Till	Apr-06	Transportation Safety
<a href="#">SPR-1475</a>	Deer-Vehicle Collisions: Understanding of Accident Characteristics and Drivers Attitude Awareness and Involvement	MSU	Jan-06	Transportation Safety
<a href="#">SPR-1476</a>	Environmental Factors Affecting the Rate of Deer Vehicle Crashes in Southern Michigan	MSU	Jan-06	Environmental
<a href="#">SPR-1477</a>	Evaluation of Exhaust Gas Emissions and Worker Exposure from Asphalt-Rubber Binders in Hot Mix Asphalt Mixtures	Wildwood	May-94	Environmental
<a href="#">SPR-1478</a>	Economic Benefits of the Michigan Department of Transportation's 2005-2009 Highway Program	EDR, U of M	Jan-05	Administration & Management
<a href="#">SPR-1478 Spotlight</a>	Demonstrating the Economic Impacts of Michigan DOT's Highway Program			Administration & Management
<i>SPR-1479</i>	<i>No Report</i>			
<i>SPR-1480</i>	<i>No Report</i>			
<a href="#">SPR-1481</a>	PCC Pavement Acceptance Criteria for New Construction when Built-In Curling Exists	U of M	Feb-08	Pavement Design & Pavement Performance
<a href="#">SPR-1482</a>	Absorption Capacity of Coarse Aggregates for Portland Cement Concrete	J. F. Staton	Sep-06	Materials
<i>SPR-1483</i>	<i>No Report</i>			
<a href="#">SPR-1484</a>	High Performance Material for Rapid Durable Repair of Bridges and Structures	U of M	Dec-06	Bridge & Special Structures Design
<i>SPR-1485</i>	<i>No Report</i>			
<i>SPR-1486</i>	<i>No Report</i>			
<a href="#">SPR-1487</a>	A Laboratory Evaluation of Alignment Tolerances for Dowel Bars and Their Effect on Joint Opening Behavior	MSU	Feb-07	Pavement Design & Pavement Performance

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<a href="#">SPR-1488</a>	Analytical Investigation of the Effects of Aligned Dowel Bars Coated with Corrosion Protective Systems on Initial Dowel Concrete Bond Stresses	MSU	Feb-07	Materials
<a href="#">SPR-1489</a>	Experimental Evaluation and Field Monitoring of Prestressed Box Beams for SCC Demonstration Bridge	MSU	Jul-07	Bridge & Special Structures Design
<a href="#">SPR-1490</a>	Bridge Deck Corner Cracking on Skewed Structures	WSU	Sep-07	Bridge & Special Structures Design
<a href="#">SPR-1491</a>	Chloride Content in Segments of the Zilwaukee Bridge	R. D. Till	May-07	Bridge & Special Structures Design
<a href="#">SPR-1492</a>	Developing Guidelines for Use of Pedestrian Countdown Traffic Signals	MSU	Jan-07	Non-Motorized Planning & Development
<a href="#">SPR-1493</a>	Graphical Analysis of Freeze-Thaw Test Results	R. W. Muethel	May-07	Pavement Design & Pavement Performance
<a href="#">SPR-1494</a>	Graphical Analysis of Iowa Pore Index Test Results	R. W. Muethel	May-07	Pavement Design & Pavement Performance
<a href="#">SPR-1495</a>	Effects of Deicing Salts on the Chloride Levels in Water and Soil Adjacent to Roadways	R. W. Muethel	Jul-07	Environmental
<a href="#">SPR-1496</a>	Reconstructing the Michigan State Police Test Tracks to Enable Evaluation of Advanced Traffic and Pavement Engineering Concepts	MSU	Jul-07	Pavement Design & Pavement Performance
<a href="#">SPR-1497</a>	Resilient Modulus at the Limits of Gradation and Varying Degrees of Saturation	MTU	Nov-07	Materials
<a href="#">SPR-1498</a>	Performance of Michigan's Concrete Barriers	J. F. Staton, J. Knauff	Aug-07	Bridge & Special Structures Design
<a href="#">SPR-1498 Spotlight</a>	In-House Research Improves Concrete Bridge Barriers			Bridge & Special Structures Design
<a href="#">SPR-1499</a>	Corrosion Resistant Alloy Steel (MMFX) Reinforcing Bar in Bridge Decks	S. Kahl	Sep-07	Bridge & Special Structures Design
<a href="#">SPR-1499 Spotlight</a>	Corrosion-Resistant Alloy Steel Extends Life of Bridges			Bridge & Special Structures Design
<a href="#">SPR-1500</a>	Evaluation of the Dynamic Late Lane Merge System at Freeway Construction Work Zones	WSU	Sep-07	Systems, Maintenance & Operations
<a href="#">SPR-1500 Spotlight</a>	New Dynamic Signage Makes Lane Merges Smoother and Safer			Systems, Maintenance & Operations
<a href="#">SPR-1501</a>	Investigation of Early Cracking on Selected JPCP Projects	MDOT & U of M	Nov-07	Pavement Design & Pavement Performance
<a href="#">SPR-1502</a>	Improved Shallow Depth Patches for Concrete Structures	MSU	Feb-08	Pavement Design & Pavement Performance
<a href="#">SPR-1503</a>	Quantifying Coefficient of Thermal Expansion Values of Typical Hydraulic Cement Concrete Paving Mixtures	MSU	Jan-08	Materials
<a href="#">SPR-1504</a>	Effect of Michigan Multi-Axle Trucks on Pavement Distress and Profile, Volume I to III	MSU	Feb-09	Pavement Design & Pavement Performance

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<a href="#">SPR-1505</a>	Development of a Simple Diagnosis Tool for Detecting Localized Roughness Features	MSU	Feb-09	Systems, Maintenance & Operations
<a href="#">SPR-1506</a>	Field Demonstration of Durable Link Slabs for Jointless Bridge Decks Based on Strain-Hardening Cementitious Composites – Phase 3: Shrinkage Control	U of M	Mar-08	Bridge & Special Structures Design
<a href="#">SPR-1506 Spotlight</a>	Engineered Cementitious Composite May Replace Bridge Deck Joints			Bridge & Special Structures Design
<a href="#">SPR-1507</a>	Evaluation of Prefabricated Composite Steel Box Girder Systems for Rapid Bridge Construction	MSU	Feb-08	Bridge & Special Structures Design
<a href="#">SPR-1508</a>	Identification Of Causes And Development Of Strategies For Relieving Structural Distress In Bridge Abutments	MSU	Feb-08	Bridge & Special Structures Design
<a href="#">SPR-1509</a>	Use of Unbonded CFCC for Transverse Post-Tensioning of Side-by-Side Box-Beam Bridges	LTU	Feb-08	Bridge & Special Structures Design
<a href="#">SPR-1509 Spotlight</a>	Carbon Fiber Post-Tensioned Cables Reduce Bridge Deck Cracking, Extend Service Life			Bridge & Special Structures Design
<a href="#">SPR-1510</a>	Location and Stability Analysis of the Michigamme Underground Mine for the US-41 Re-Alignment in Marquette County, Michigan	MTU	Aug-08	Pavement Design & Pavement Performance
<a href="#">SPR-1511</a>	Recommendations for Michigan Specific Load and Resistance Factor Design Loads and Load and Resistance Factor Rating Procedures	R. Curtis, R. Till	Apr-08	Pavement Design & Pavement Performance
<a href="#">SPR-1511 Spotlight</a>	Calibrating National Bridge Standards for Michigan's Unique Truck Loading			Pavement Design & Pavement Performance
<a href="#">SPR-1512</a>	Evaluation of Grout-Filled Mechanical Splices for Precast Concrete Construction	P. Jansson	May-08	Materials
<a href="#">SPR-1513</a>	Evaluation of Economic Impacts of Michigan VII Program (Vehicle Infrastructure Integration)	MSU	Sep-07	Systems, Maintenance & Operations
<a href="#">SPR-1513 Spotlight</a>	Making the Economic Case for IntelliDrive			Systems, Maintenance & Operations
<a href="#">SPR-1514</a>	Combining Link Slab, Deck Sliding over Backwall, and Revising Bearings	WMU	Jul-08	Bridge & Special Structures Design
<a href="#">SPR-1515</a>	Performance of Isotropic Bridge Decks	P. Jansson	Jun-08	Bridge & Special Structures Design
<a href="#">SPR-1516</a>	Evaluation of the 1-37A Design Process for New and Rehabilitated JPCP and HMA Pavements	MSU	Oct-08	Pavement Design & Pavement Performance
<a href="#">SPR-1516 Spotlight</a>	Implementing the Mechanistic Empirical Pavement Design Guide in Michigan			Pavement Design & Pavement Performance
<a href="#">SPR-1517</a>	Analysis of Stress Distribution in Link Plates Used for Suspending Bridge Beams	P. Jansson	Sep-08	Bridge & Special Structures Design
<a href="#">SPR-1518</a>	Evaluating the Economic Benefits to Michigan of Alternative Road-Bridge Investment Mixes	U of M	Mar-08	Bridge & Special Structures Design
<a href="#">SPR-1519</a>	Calculating the Critical Buckling Stress for Plates With One Free Edge Under Combined Axial and Flexural Forces	R. Curtis, R. Till	Sep-08	Bridge & Special Structures Design

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<a href="#">SPR-1520</a>	Methodology of Homogeneous and Non-Homogeneous Markov Chains for Modeling Bridge Element Deterioration	WSU	Aug-08	Bridge & Special Structures Design
<a href="#">SPR-1521</a>	Development of Simple Performance Tests Using Laboratory Test Procedures to Illustrate the Effects of Moisture Damage on Hot Mix Asphalt	MTU	Apr-06	Materials
<a href="#">SPR-1522</a>	Development of Acceptance Criteria of Compacted Hot Mixture Asphalt Bulk Specific Gravity Based on Vacuum Sealed Specimens: Final Report	MTU	Oct-05	Materials
<a href="#">SPR-1523</a>	Performance Evaluation of JRCP with Stabilized Open-Graded Drainage Course	U of M	Aug-09	Pavement Design & Pavement Performance
<a href="#">SPR-1524</a>	Value Affect of Construction Incentive Payments on Pavement Performance	MSU	Aug-09	Contracting & Contract Administration
<a href="#">SPR-1525</a>	Ultra-High Performance Concrete for Michigan Bridges, Material Performance – Phase I, Final Report	MTU	Nov-08	Bridge & Special Structures Design
<a href="#">SPR-1526</a>	Estimate of Cliff Recession Rates for the Baraga Cliffs	MTU	Aug-08	Geotechnical & Foundation Design
<a href="#">SPR-1527</a>	Condition Assessment and Methods of Abatement of Prestressed Concrete Box-Beam Deterioration – Phase II	WMU	Apr-09	Bridge & Special Structures Design
<a href="#">SPR-1528</a>	Absorption Capacity of Coarse Aggregates for Portland Cement Concrete	J. F. Staton, J. D. Anderson	Feb-09	Materials
<a href="#">SPR-1529</a>	Overload Truck Wheel Load Distribution on Bridge Decks	R. D. Till	Apr-09	Bridge & Special Structures Design
<a href="#">SPR-1530</a>	Cement Kiln Dust Stabilized Test Section on I-96/I-75 in Wayne County – Construction Report	N. Bandara, M. Grazioli	May-09	Materials
<a href="#">SPR-1531</a>	Pavement Subgrade MR Design Values for Michigan’s Seasonal Changes	MSU	Jul-09	Pavement Design & Pavement Performance
<a href="#">SPR-1532</a>	Development of Specifications for Superpave Simple Performance Tests	MTU	May-09	Pavement Design & Pavement Performance
<a href="#">SPR-1533</a>	Evaluation of Concrete Pavements with Materials-Related Distress	MTU	Mar-10	Pavement Design & Pavement Performance
<a href="#">SPR-1534</a>	Durability Study of the US-23 Aggregate Test Road and Recent JPCP Projects with Premature Joint Deterioration	U of M	Dec-10	Pavement Design & Pavement Performance
<a href="#">SPR-1535</a>	Development of New Test Procedures for Measuring Fine and Coarse Aggregate Specific Gravities	MTU	Dec-09	Materials
<a href="#">SPR-1535 Spotlight</a>	New Lab Tests Show Promise in Verifying Pavement Mix Designs			Materials
<a href="#">SPR-1536</a>	A Sensor Network System for the Health Monitoring of the Parkview Bridge Deck	WMU	Jan-10	Bridge & Special Structures Design
<a href="#">SPR-1536 Spotlight</a>	Michigan Gains Valuable Experience from Demonstration of Rapid Bridge Construction			Bridge & Special Structures Design
<a href="#">SPR-1537</a>	Characterization of Truck Traffic in Michigan for the New Mechanistic Empirical Pavement Design Guide	MSU	Dec-09	Pavement Design & Pavement Performance

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<a href="#">SPR-1537 Spotlight</a>	Fitting Traffic Data into Mechanistic-Empirical Pavement Design			Pavement Design & Pavement Performance
<a href="#">SPR-1538</a>	Fifteen Year Performance Review of Michigan's European Concrete Pavement	D. L. Smiley	Feb-10	Pavement Design & Pavement Performance
<a href="#">SPR-1539</a>	An Evaluation of Right-Turn-In/Right-Turn-Out Restrictions in Access Management	MSU	Sep-09	Planning
<a href="#">SPR-1540</a>	Assessment of Pavement Acceptance Criteria and Quantifying its As-Constructed Material and Structural Properties	MSU	Mar-11	Pavement Design & Pavement Performance
<a href="#">SPR-1541</a>	Skewed Highway Bridges	WSU	Jul-13	Bridge & Special Structures Design
<a href="#">SPR-1542</a>	Improving Driver's Ability to Safely and Effectively Use Roundabouts: Educating the Public to Negotiate Roundabouts	WSU	Mar-11	Transportation Safety
<a href="#">SPR-1542 Spotlight</a>	Roundabouts: How to Get Around a Safer Intersection			Transportation Safety
<a href="#">SPR-1543</a>	Evaluation of Steady-Burn Warning Lights on Channelizing Drums in Work Zones	WSU	Dec-10	Systems, Maintenance & Operations
<a href="#">SPR-1544</a>	Using Recycled Concrete in MDOT's Transportation Infrastructure – Manual of Practice	MTU	Aug-11	Pavement Design & Pavement Performance
<a href="#">SPR-1544 Spotlight</a>	Using Recycled Concrete for Sustainable Roadways			Pavement Design & Pavement Performance
<a href="#">SPR-1544A</a>	Efficient Use of Recycled Concrete in Transportation Infrastructure	MTU	Jan-11	Pavement Design & Pavement Performance
<a href="#">SPR-1545</a>	Michigan Ohio University Transportation Center – Multiple Reports	Univ. of Detroit Mercy	Dec-10	Systems, Maintenance & Operations
<a href="#">SPR-1546</a>	Effects of Debonded Strands on the Production and Performance of Prestressed Concrete Beams	MSU	Jan-11	Bridge & Special Structures Design
<a href="#">SPR-1546 Spotlight</a>	Strand Debonding Helps Minimize Bridge Beam End Cracking			Bridge & Special Structures Design
<a href="#">SPR-1547</a>	A Critical Evaluation of Bridge Scour for Michigan Specific Conditions	LTU & WSU	Feb-11	Bridge & Special Structures Design
<a href="#">SPR-1548</a>	Backcalculation of Unbound Granular Layer Moduli	MSU	Mar-11	Pavement Design & Pavement Performance
<a href="#">SPR-1549</a>	ECR Bridge Decks: Damage Detection & Assessment of Remaining Life for Various Overlay Repair Options (Parts I & II)	MSU	Jan-11	Bridge & Special Structures Design
<a href="#">SPR-1549 Spotlight 1</a>	Moving Toward Electronic Testing for Invisible Bridge Deck Damage			Bridge & Special Structures Design
<a href="#">SPR-1549 Spotlight 2</a>	Testing Epoxy-Coated Rebar Helps Refine Bridge Maintenance Strategies			Bridge & Special Structures Design
<a href="#">SPR-1550</a>	Sustainable Recycled Materials for Concrete Pavements	Applied Pave.Tech	Mar-11	Materials

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<a href="#">SPR-1551</a>	Extending the Life of Asphalt Pavements	Applied Research Assoc. Inc	May-11	Pavement Design & Pavement Performance
<a href="#">SPR-1551 Spotlight</a>	Targeted Strategies to Extend the Life of Asphalt Pavements			Pavement Design & Pavement Performance
<a href="#">SPR-1552</a>	Impact of Hydrated Cement Paste Quality and Entrained Air Void System on the Durability of Concrete	MTU	Jun-11	Pavement Design & Pavement Performance
<a href="#">SPR-1553</a>	Carbon Footprint for Hot Mix Asphalt and Portland Cement Concrete Pavements	MTU	Jun-11	Pavement Design & Pavement Performance
<a href="#">SPR-1554</a>	A Michigan Toolbox for Mitigating Traffic Congestion (Parts I & II)	TTI	Sep-11	Systems, Maintenance & Operations
<a href="#">SPR-1554 Spotlight</a>	Reducing Traffic Congestion on a Budget			Systems, Maintenance & Operations
<a href="#">SPR-1555</a>	Safety Analysis of 4-Lane to 3-Lane Conversions (Road Diets) in Michigan	MSU	Jan-12	Transportation Safety
<a href="#">SPR-1555 Spotlight</a>	Safety and Operational Analysis of Four-Lane to Three-Lane Conversions (Road Diets) in Michigan			Transportation Safety
<a href="#">SPR-1556</a>	Laboratory Evaluation of Warm Mix Asphalt (WMA)	MTU	Sep-11	Materials
<a href="#">SPR-1557</a>	Feasibility of Digital Imaging to Characterize Earth Materials	U of M	Jun-12	Systems, Maintenance & Operations
<a href="#">SPR-1557 Spotlight</a>	Cameras Instead of Sieves for Aggregate Characterization			Systems, Maintenance & Operations
<i>SPR-1558</i>	<i>Study of Most Effective Practices for Determining Construction Contractors' Eligibility to Bid on Construction Projects – No Report</i>	<i>Dye Management</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1559</a>	Strategies for Improving Traveler Information	Cambridge Systematics	Jan-11	Systems, Maintenance & Operations
<a href="#">SPR-1560</a>	Stainless and Stainless-Clad Reinforcement for Highway Bridge Use	S. Kahl	Dec-11	Bridge & Special Structures Design
<a href="#">SPR-1561</a>	Improving Driver Safety with Behavioral Countermeasures	CMU	Sep-11	Transportation Safety
<a href="#">SPR-1561 Spotlight</a>	Changing the Behavior to Improve Driver Safety			Transportation Safety
<a href="#">SPR-1562</a>	Recommendations for Meeting the Transportation Needs of Michigan's Aging Population	U of M	Sep-11	Transportation Safety
<a href="#">SPR-1562 Spotlight</a>	Enhancing the Safety and Mobility of Michigan's Older Residents			Transportation Safety
<a href="#">SPR-1563</a>	High Skew Link Slab Bridge System with Deck Sliding over Backwall or Backwall Sliding over Abutment	WMU	Sep-11	Bridge & Special Structures Design
<a href="#">SPR-1563 Spotlight</a>	Improving the Design of High-Skew Jointless Bridges			Bridge & Special Structures Design

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<a href="#">SPR-1564</a>	Development and Validation of a Sensor-Based Health Monitoring Model for Parkview Bridge Deck	WSU	Jan-12	Bridge & Special Structures Design
<a href="#">SPR-1565</a>	Evaluating Performance and Making Best Use of Passing Relief Lanes	Opus International	Dec-11	Roadway Design
<a href="#">SPR-1565 Spotlight</a>	Assessing the Impact of Passing Relief Lanes			Roadway Design
<a href="#">SPR-1566</a>	Evaluating the Performance and Effectiveness of Roundabouts	Opus International	Dec-11	Roadway Design
<a href="#">SPR-1566 Spotlight</a>	Assessing the Performance of Michigan Roundabouts			Roadway Design
<a href="#">SPR-1567</a>	Investigate Causes and Develop Methods for Preventing Falling Concrete from Bridges	LTU	Sep-12	Bridge & Special Structures Design
<a href="#">SPR-1568</a>	Usage and Impact of the Vehicle Infrastructure Integration (VII) Program	Mixon/Hill of MI, Inc.	Mar-12	Systems, Maintenance & Operations
<a href="#">SPR-1569</a>	Re-Examination of the 1994 and Subsequent sewer and Culvert Installations of Various Pipe Types, Sizes and Depths	URS	Feb-14	Geotechnical & Foundation Design
<a href="#">SPR-1570</a>	Evaluating the Appropriate Level of Service for Michigan Rest Areas and Welcome Centers Considering Safety and Economic Factors	WSU	Apr-12	Tourism
<a href="#">SPR-1570 Spotlight</a>	Valuing Michigan's Rest Areas: A Cost-Benefit Approach			Tourism
<a href="#">SPR-1571</a>	Identification of Causes and Solution Strategies for Deck Cracking in Jointless Bridges	MSU	Jul-12	Bridge & Special Structures Design
<a href="#">SPR-1572</a>	Sharing the Road – Optimizing Pedestrian and Bicycle Safety and Vehicle Mobility	T.Y. Lin International, WMU, Corradino Grp	Apr-12	Non-Motorized Planning & Development
<a href="#">SPR-1572 Spotlight</a>	Comprehensive Guidance for Pedestrian and Bicycle Safety Improvements			Non-Motorized Planning & Development
<a href="#">SPR-1573</a>	Slippery Road Detection and Evaluation	UMTRI – R. Robinson	May-12	Pavement Design & Pavement Performance
<a href="#">SPR-1573 Spotlight</a>	Slippery Road Detection is a Promising Benefit of Connected Vehicles			Pavement Design & Pavement Performance
<a href="#">SPR-1574</a>	Improved Performance of JPCP Overlays	U of M	Jul-13	Pavement Design & Pavement Performance
<a href="#">SPR-1575</a>	Impact of Non-Freeway Rumble Strips – Phase 1	WSU	Jun-12	Transportation Safety
<a href="#">SPR-1575 Spotlight</a>	Evaluating the Benefits of Centerline Rumble Strips on Rural Highways			Transportation Safety
<a href="#">SPR-1576</a>	A Framework for Statewide Roadway Asset Management	Dye Management	Apr-12	Planning
<i>SPR-1577</i>	<i>Review and Revision of Overload Permit Classification (See SPR-1589)</i>	<i>Michael Baker, Jr., Inc.</i>	<i>N/A</i>	<i>Not Available</i>



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<a href="#">SPR-1578</a>	Timing Issues for Traffic Signals Interconnected with Highway-Railroad Grade Crossings	WSU	Feb-13	Systems, Maintenance & Operations
<a href="#">SPR-1578 Spotlight</a>	Improving Safety Through Traffic Signal Coordination Near Highway-Railroad Grade Crossings			Systems, Maintenance & Operations
<a href="#">SPR-1579</a>	Cost Effectiveness of the MDOT Preventive Maintenance Program	Applied Pavement Technologies	Apr-13	Asset Management
<a href="#">SPR-1580</a>	Evaluating the Financial Cost and Impact on Long Term Pavement Performance of Expediting Michigan's Road Construction Work	MSU	Feb-14	Systems, Maintenance & Operations
<a href="#">SPR-1581</a>	Best Practices for Emergency Rerouting	Kimley Horn	Sep-12	Transportation Safety
<a href="#">SPR-1582</a>	Examining the Disadvantaged Business Enterprise (DBE) Program	U of M	Sep-12	Contracting & Contract Administration
<a href="#">SPR-1582 Spotlight</a>	Improving Communications for MDOT's DBE Program			Contracting & Contract Administration
<a href="#">SPR-1583</a>	Implementation of Quick Clearance in Michigan	Cambridge Systematics	Sep-12	Transportation Safety
<a href="#">SPR-1583 Spotlight</a>	Spreading the Word About the Quick Clearance Law			Transportation Safety
<a href="#">SPR-1584</a>	Transportation Reliability and Trip Satisfaction	WSU	Oct-12	Systems, Maintenance & Operations
<a href="#">SPR-1585</a>	Evaluating Pedestrian Safety Improvements	WMU	Dec-12	Non-Motorized Planning & Development
<a href="#">SPR-1586</a>	Implementation of Sustainable and Green Design and Construction Practices for Bridges	MSU, Univ. of New Haven	Dec-12	Bridge & Special Structures Design
<a href="#">SPR-1587A</a>	Development and Validation of Deterioration Models for Concrete Bridge Decks – Phase 1: Artificial Intelligence Models and Bridge Management System	MSU	Jun-13	Bridge & Special Structures Design
<a href="#">SPR-1587B</a>	Development and Validation of Deterioration Models for Concrete Bridge Decks – Phase 2: Mechanics-based Degradation Models	MSU	Jun-13	Bridge & Special Structures Design
<a href="#">SPR-1588</a>	VII Data Use Analysis and Processing (DUAP) Final Project Report (Phase II)	UMTRI	Jul-11	Systems, Maintenance & Operations
<a href="#">SPR-1589</a>	Review and Revision of Overload Permit Classification	Michael Baker, Jr. Inc.	Feb-13	Commerical Vehicle Enforcement
<a href="#">SPR-1589 Spotlight</a>	Updating Overload Permit Analysis to Better Serve MDOT and Local Agencies			Commerical Vehicle Enforcement
<a href="#">SPR-1590</a>	Assessment of ODOT Culvert Load Rating Spreadsheets for use in Michigan	MTU	Jan-13	Geotechnical & Foundation Design
<a href="#">SPR-1591</a>	Alternative Materials for Sustainable Transportation	MTU	Aug-12	Materials
<a href="#">SPR-1592</a>	Recommendations for Meeting the Mobility Needs of Older Adults in Rural Michigan	UMTRI	Dec-12	Transportation Safety

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<a href="#">SPR-1592 Spotlight</a>	Improving Mobility and Transportation Options for Michigan's Rural Seniors			Transportation Safety
<a href="#">SPR-1593</a>	Preparation for Implementation of the Mechanistic-Empirical Pavement Design Guide in Michigan – Part 1: HMA Mixture Characterization	MSU	Mar-13	Pavement Design & Pavement Performance
<a href="#">SPR-1593 &amp; SPR-1594 Spotlight</a>	Final Steps Toward Using MEPDG in Michigan - Parts 1 and 2			Pavement Design & Pavement Performance
<a href="#">SPR-1594</a>	Preparation for Implementation of the Mechanistic-Empirical Pavement Design Guide in Michigan – Part 2: Rehabilitation Evaluation	MSU	Aug-13	Pavement Design & Pavement Performance
<a href="#">SPR-1595</a>	Preparation for Implementation of the Mechanistic-Empirical Pavement Design Guide in Michigan – Part 3: Calibration and Validation	MSU	Nov-14	Pavement Design & Pavement Performance
<a href="#">SPR-1596</a>	Decision Framework for Corridor Planning within the Roadside Right-of-Way	WSU	Aug-13	Right-of-Way Permitting
<a href="#">SPR-1596 Spotlight</a>	A Framework for Planning Right-of-Way Development			Right-of-Way Permitting
<a href="#">SPR-1597</a>	Research on Non-Destructive Evaluation Seminar – Workshop	WMU	Sep-13	Bridge & Special Structures Design
<a href="#">SPR-1598</a>	Greenhouse Gas Inventory of the Michigan Department of Transportation	Fishbeck, Thompson, Carr & Huber	Nov-13	Environmental
<a href="#">SPR-1599A</a>	Detroit Regional Transit Study: A Study of Factors that Inhibit and Enable Effective Development of Sustainable Regional Transit Systems in Southeastern Michigan	UDM	Mar-14	Multi-Modal
<a href="#">SPR-1599B</a>	Regional Transit Stew: Consensus Building and Transit Building in Metro Detroit	UDM	Mar-14	Multi-Modal
<a href="#">SPR-1599C</a>	Detroit Regional Transit Legal Structures and Governance	UDM	Mar-14	Multi-Modal
<a href="#">SPR-1599D</a>	Social Equity, Mobility, and Access	UDM	Mar-14	Multi-Modal
<a href="#">SPR-1599E</a>	Transit-Oriented Development (TOD) in Metro Detroit	UDM	Mar-14	Multi-Modal
<a href="#">SPR-1599F</a>	Funding Structures and Competing Priorities for Regional Transit in Metro Detroit	UDM	Mar-14	Multi-Modal
<a href="#">SPR-1599G</a>	The Role of Media and Public Opinion Efforts in the Transit Field: The Detroit Region Case Study	UDM	Mar-14	Multi-Modal
<a href="#">SPR-1600</a>	Effect of Pile-Driving Induced Vibrations on Nearby Structures and Other Assets	U of M	Nov-13	Environmental
<a href="#">SPR-1600 Spotlight</a>	Minimizing the Effects of Pile Driving Vibrations			Environmental
<a href="#">SPR-1601</a>	Side By Side Probability for Bridge Design and Analysis	WSU	Aug-14	Bridge & Special Structures Design
<a href="#">SPR-1601-Part 2</a>	Side By Side Probability for Bridge Design and Analysis, Part 2	WSU	Aug-14	Bridge & Special Structures Design

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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-1602</a>	Improving Bridges with Prefabricated Precast Concrete Systems	WMU	Dec-13	Bridge & Special Structures Design
<a href="#">SPR-1602 Appendix</a>	Improving Bridges with Prefabricated Precast Concrete Systems	WMU	Dec-13	Bridge & Special Structures Design
<a href="#">SPR-1602 Spotlight</a>	Accelerating Bridge Construction to Minimize Traffic Disruption			Bridge & Special Structures Design
<a href="#">SPR-1603</a>	Development of Performance Measures for Non-Motorized Dynamics	WMU	Dec-13	Non-Motorized Planning & Development
<a href="#">SPR-1604</a>	Remanufacturing, Repurposing, and Recycling of Post-Vehicle-Application Lithium-Ion Batteries	GVSU	Jun-14	Environmental
<a href="#">SPR-1605</a>	Twenty Year Performance Review of Michigan's European Concrete Pavement	MDOT	Oct-13	Pavement Design & Pavement Performance
<a href="#">SPR-1606A</a>	Assessment of Aggregate Sources in Michigan for High Speed Railroad Ballast	MTU	Jan-14	Materials
<a href="#">SPR-1606B</a>	Highway-Railroad Grade Crossing Surface Material Performance	MTU	Apr-14	Multi-Modal
<a href="#">SPR-1606C</a>	Rural Freight Rail and Multimodal Transportation Improvements – the Upper Peninsula of Michigan	MTU	Jul-14	Multi-Modal
<a href="#">SPR-1607</a>	Monitoring Highway Assets with Remote Technology	Dye Management	Jul-14	Systems, Maintenance & Operations
<a href="#">SPR-1607 Spotlight</a>	Monitoring Highway Assets Using Remote Sensing Technology			Systems, Maintenance & Operations
<a href="#">SPR-1608</a>	Synthesis of Methods for Procurement and Developing Transit Vehicle Specifications	URS	Jun-14	Multi-Modal
<a href="#">SPR-1609A</a>	Evaluating the Impacts of Speed Limit Policy Alternatives	WSU	Jul-14	Transportation Safety
<a href="#">SPR-1609A Spotlight</a>	Evaluating the Impacts of Proposed Speed Limit Increases in Michigan			Transportation Safety
<a href="#">SPR-1609B</a>	Evaluating Outcomes of Raising Speed Limits on High Speed Non-Freeways	WSU	Apr-15	Transportation Safety
<a href="#">SPR-1610</a>	Accelerated Bridge Construction and Structural Move – Workshop	WMU	Mar-14	Bridge & Special Structures Design
<i>SPR-1611</i>	<i>Evaluating Roadway Surface Rating Technologies – (See SPR-1621)</i>	<i>U of M</i>	<i>N/A</i>	<i>Not Available</i>
<a href="#">SPR-1612</a>	Study of High Tension Cable Barrier on Michigan Roadways	WSU	Oct-14	Transportation Safety
<a href="#">SPR-1612 Spotlight</a>	Cable Median Barriers: A Cost-Effective Means To Save Lives			Transportation Safety
<a href="#">SPR-1613</a>	Measuring Michigan Local and Statewide Transit Levels of Service	Cambridge	Sep-14	Multi-Modal

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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-1614</a>	Design and Construction Guidelines for Strengthening Bridges using Fiber Reinforced Polymers (FRP)	WSU	Sep-14	Bridge & Special Structures Design
<a href="#">SPR-1614 Spotlight</a>	Guidelines for Using Fiber-Reinforced Polymer Composite Materials to Extend Bridge Life			Bridge & Special Structures Design
<a href="#">SPR-1615</a>	Evaluation of Prestressed Concrete Beams in Shear	WSU	Sep-14	Bridge & Special Structures Design
<a href="#">SPR-1616</a>	Evaluating the use of Unmanned Aerial Vehicle (UAVs) for Transportation Purposes	MTU	Apr-15	Systems, Maintenance & Operations
<a href="#">SPR-1616 Spotlight</a>	Taking Flight with Sensing Equipment will Deliver Benefits Across MDOT			Systems, Maintenance & Operations
<a href="#">SPR-1617</a>	Evaluation of Bridge Decks using Non-Destructive Evaluation (NDE) at Near Highway Speeds for Effective Asset Management	MTU	Mar-15	Bridge & Special Structures Design
<a href="#">SPR-1617-Appendices</a>	Evaluation of Bridge Decks using Non-Destructive Evaluation (NDE) at Near Highway Speeds for Effective Asset Management	MTU	Mar-15	Bridge & Special Structures Design
<a href="#">SPR-1617B</a>	Evaluation of Bridge Decks using Non-Destructive Evaluation (NDE) at Near Highway Speeds for Effective Asset Management – Pilot Project	MTU	Sep-16	Bridge & Special Structures Design
<a href="#">SPR-1617C</a>	Evaluation of Bridge Decks using Non-Destructive Evaluation (NDE) at Near Highway Speeds for Effective Asset Management – Pilot Project	MTU	Oct-18	Bridge & Special Structures Design
<a href="#">SPR-1617C Spotlight</a>	Improved Asset Management of Reinforced Concrete Bridge Decks			Bridge & Special Structures Design
<a href="#">SPR-1618A</a>	Research on Evaluation and Standardization of Accelerated Bridge Construction (ABC) Techniques	WMU	Sep-15	Bridge & Special Structures Design
<a href="#">SPR-1618A Spotlight</a>	Evaluation and Standardization of Accelerated Bridge Construction (ABC) Techniques			Bridge & Special Structures Design
<a href="#">SPR-1618B</a>	Research on Evaluation and Standardization of Accelerated Bridge Construction (ABC) Techniques – Bridge Slide Showcase	WMU	Aug-14	Bridge & Special Structures Design
<a href="#">SPR-1618C</a>	Research on Evaluation and Standardization of Accelerated Bridge Construction (ABC) Techniques	WMU	Sep-17	Bridge & Special Structures Design
<a href="#">SPR-1619</a>	Predictive Modeling of Freezing and Thawing of Frost-Susceptible Soils	MSU	Sep-15	Environmental
<a href="#">SPR-1619 Spotlight</a>	Better Soil Freezing Model May Help Reduce Infrastructure Damage			Environmental
<a href="#">SPR-1620</a>	Evaluation & Analysis of Decked Bulb-T Beam Bridge	LTU	Mar-15	Bridge & Special Structures Design
<a href="#">SPR-1620 Spotlight</a>	New Bridge Design Promises to Lengthen Service Life			Bridge & Special Structures Design

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Report Number	Title	Author	Publication Date	Category
<a href="#">SPR-1621</a>	Evaluating Roadway Surface Rating Technologies	U of M	Jun-15	Asset Management
<a href="#">SPR-1622</a>	Evaluating Michigan Commercial Vehicle Enforcement Strategies and Facilities	WMU	Mar-15	Commerical Vehicle Enforcement
<a href="#">SPR-1623</a>	Evaluating the Use of Tow Plows	LTU	Sep-16	Systems, Maintenance & Operations
<a href="#">SPR-1623 Spotlight</a>	Tow Plows Could Help Michigan Save Time and Money On Winter Maintenance			Systems, Maintenance & Operations
<a href="#">SPR-1624</a>	A Method to Assess the Use of New and Recycled Materials in Pavements	MSU	Apr-15	Materials
<a href="#">SPR-1624 Spotlight</a>	Software Offers Transparent, Straightforward Assessment of Pavement Additives			Materials
<a href="#">SPR-1625</a>	Infrastructure Monitoring Data Management	A. Benesch	Jul-15	Asset Management
<a href="#">SPR-1626</a>	Improving of Michigan Climatic Files in Pavement ME Design	MTU	Oct-15	Pavement Design & Pavement Performance
<a href="#">SPR-1627</a>	Evaluation of Non-Freeway Rumble Strips – Phase II	WSU	Mar-15	Transportation Safety
<a href="#">SPR-1627 Implementation Guidelines</a>	Evaluation of Non-Freeway Rumble Strips – Phase II	WSU	Mar-15	Transportation Safety
<a href="#">SPR-1627 Spotlight</a>	Centerline Rumble Strips on Rural Highways Shown to Cut Crashes in Half			Transportation Safety
<a href="#">SPR-1628</a>	Michigan Urban Trunkline Intersections Safety Performance Function (SPFs) Development and Support	WSU	Jun-15	Transportation Safety
<a href="#">SPR-1628 Spotlight</a>	Local Data Will Help Michigan Make Better Safety Investment Decisions			Transportation Safety
<a href="#">SPR-1629</a>	Remote Monitoring of Fatigue-Sensitive Details on Bridges	WMU	Mar-15	Bridge & Special Structures Design
<a href="#">SPR-1630</a>	Balancing the Costs of Mobility Investments in Work Zones – Phase 1	WSU	Jun-15	Construction
<a href="#">SPR-1631</a>	Cost and Benefits of MDOT Intelligent Transportation System Deployments	WMU	Jul-15	Systems, Maintenance & Operations
<a href="#">SPR-1631 Spotlight</a>	ITS Technologies Reduce Delay, Crashes and Emissions, With Significant Returns On Investment			Systems, Maintenance & Operations
<a href="#">SPR-1632</a>	Evaluating Prestressing Strands and Post-Tensioning Cable in Concrete Structures using Nondestructive Evaluation Methods	LTU	Nov-15	Bridge & Special Structures Design
<a href="#">SPR-1632 Spotlight</a>	Nondestructive Bridge Evaluations Guide Repair Decisions			Bridge & Special Structures Design
SPR-1633	Not Published			

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<a href="#">SPR-1634</a>	Wireless Data Collection Retrievals of Bridge Inspection / Management Information	MTU	Feb-17	Bridge & Special Structures Design
<a href="#">SPR-1634 Spotlight</a>	New 3-D App Speeds Bridge Inspection			Bridges & Speical Structures Design
<a href="#">SPR-1635</a>	Performance Evaluation of Subgrade Stabilization with Recycled Materials	LTU	Feb-16	Materials
<a href="#">SPR-1635 Spotlight</a>	Soil Stabilization with Recycled Materials Improves Subgrade Performance			Materials
<a href="#">SPR-1636</a>	Evaluation of Michigan's Engineering Improvements for Older Drivers	WMU	Sep-15	Transportation Safety
<a href="#">SPR-1636 Spotlight</a>	New Signs and Signals Make Roads Safer for Older Drivers			Transportation Safety
<a href="#">SPR-1637</a>	Development, Characterization and Applications of a Non-Proprietary Ultra-High Performance Concrete for Highway Bridges	U of M	Mar-16	Bridge & Special Structures Design
<a href="#">SPR-1637 Spotlight</a>	MDOT Aims for Lower-Cost Ultra-High Performance Concrete			Bridge & Special Structures Design
<a href="#">SPR-1638</a>	Comparison of Alternative Pedestrian Crossing Treatments	WMU	Feb-16	Transportation Safety
<a href="#">SPR-1638 Spotlight</a>	Gateway Treatment Alternatives for Pedestrian Crossings			Transportation Safety
<a href="#">SPR-1639</a>	Michigan Urban Trunkline Segments Safety Performance Functions (SPFs) Development and Support	MSU	Jul-16	Transportation Safety
<a href="#">SPR-1639 Spotlight</a>	Local Data Will Help Michigan Make Better Safety Investment Decisions			Transportation Safety
<a href="#">SPR-1640</a>	Developing Representative Michigan Truck Configurations for Bridge Load Rating	WSU	Feb-18	Bridge & Special Structures Design
<a href="#">SPR-1640 Spotlight</a>	Developing Representative Michigan Truck Configurations for Bridge Load Rating			Bridge & Special Structures Design
<i>SPR-1641</i>	<i>No Report</i>			
<a href="#">SPR-1642</a>	Bridge Design System Analysis and Modernization	MTU	Sep-16	Bridge & Special Structures Design
<a href="#">SPR-1642 Spotlight</a>	Updated Bridge Design System Endures as a Unique, Powerful Tool for MDOT's Design Division			Bridge & Special Structures Design
<a href="#">SPR-1643</a>	Comparison of Alternative Pedestrian Crossing Treatments: Follow-Up Report	WMU	Dec-16	Transportation Safety
<a href="#">SPR-1643 Spotlight</a>	Gateway Treatment Alternatives for Pedestrian Crossings		Jul-05	Transportation Safety
<a href="#">SPR-1645</a>	Michigan Rural Segment Safety Performance Function (SPFs) Development and Support	MSU	Mar-18	Road Design/Transportation Safety

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<a href="#">SPR-1645 Spotlight</a>	Site-Specific Data will Improve Safety Decisions for Michigan Rural Roads		Aug-18	Road Design/Transportation Safety
<a href="#">SPR-1646</a>	Evaluation of Road Delineation of Practices in Michigan	Opus Intl	Mar-17	Transportation Safety
<a href="#">SPR-1646 Spotlight</a>	MDOT's Successful Road Delineation Program Will Become Even Better			Transportation Safety
<a href="#">SPR-1647</a>	Development of 3D and 4D Bridge Models and Plans	Parsons Brinckerhoff	May-18	Bridge & Special Structures Design
<a href="#">SPR-1647 Spotlight</a>	Implementing 3-D and 4-D modeling software to enhance bridge design			Bridge & Special Structures Design
<a href="#">SPR-1648</a>	Evaluating the Impacts of Speed Limit Increases on Identified Case Studies	WMU	Dec-18	Transportation Safety
<a href="#">SPR-1649</a>	Development of an Acceptance Test for Chip Seal Projects	MSU	Jan-17	Pavement Design & Pavement Performance
<a href="#">SPR-1650</a>	UTC: National University Rail Transportation Center (NURail) - Tier I	MTU	Feb-17	Multi-Modal
<a href="#">SPR-1651</a>	Developing Michigan Pedestrian and Bicycle Safety Models	UMTRI	Jul-18	Not Available
<a href="#">SPR-1651 User Manual</a>	Developing Michigan Pedestrian and Bicycle Safety Models	U of M	Mar-17	Pavement Design & Pavement Performance
<a href="#">SPR-1652</a>	Concrete Pavement Performance Center of Excellence (CPP-COE) – Supplemental Services	U of M	Mar-17	Pavement Design & Pavement Performance
<a href="#">SPR-1652 Spotlight</a>	US-23 Aggregate Test Road			Pavement Design & Pavement Performance
<a href="#">SPR-1653</a>	Association of Michigan's Older Adult Crashes with Roadway Features	WMU	Mar-17	Transportation Safety
<a href="#">SPR-1653 Spotlight</a>	Design Enhancements Make Roads Safer For Older Drivers			Transportation Safety
<a href="#">SPR-1654</a>	Advanced Applications of Intellidrive Data Use Analysis and Processing 2 (DUAP 2)	Mixon/Hill of MI, Inc.	Jul-18	System Maintenance Operations
<a href="#">SPR-1654 Spotlight</a>	DUAP System Creates Framework for Sharing Data throughout MDOT			System Maintenance Operations
<a href="#">SPR-1655</a>	Further Assessments of Safe, Quick Clearance Strategies, Phase II	Gannett Flemming	Jul-18	Transportation Safety
<a href="#">SPR-1655 Spotlight</a>	Michigan's Traffic Incident Management Effort: Progress and Future Vision			Transportation Safety
<a href="#">SPR-1666</a>	Identify Best Practices in Pavement Design, Materials, Construction, and Maintenance in Wet Freeze Climates Similar to Michigan	MTU	Mar-18	Pavement Design & Pavement Performance
<a href="#">SPR-1666 Spotlight</a>	Study identifies best pavement practices in wet-freeze climates			Pavement Design & Pavement Performance



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<a href="#">SPR-1667</a>	The Use of Bridge Managements Software in the Network Analysis of Big Bridges	Modjeski and Masters	Dec-17	Bridge & Special Structures Design
<a href="#">SPR-1667 Spotlight</a>	The Use of Bridge Managements Software in the Network Analysis of Big Bridges			Bridge & Special Structures Design
<a href="#">SPR-1668</a>	Analysis of Need for Recalibration of Concrete IRI and HMA Thermal Cracking Models in Pavement ME Design	MSU	Nov-17	Pavement Design & Pavement Performance
<a href="#">SPR-1669</a>	Evaluation of Cost/Benefits of Standardization of Secondary Route Bridges	WSU	Mar-18	Bridge & Special Structures Design
<a href="#">SPR-1669 Spotlight</a>	Ready-to-use Designs Help Local Agencies Build Cost-Effective, Quality Bridges			Bridge & Special Structures Design
<a href="#">SPR-1670</a>	Commercial production of Non-Proprietary Ultra High Performance Concrete	U of M	Dec-18	Bridge & Special Structures Design
<a href="#">SPR-1670 Spotlight</a>	MDOT Research Develops Generic Ultra-High Performance Concrete for Mixing in Field			Bridge & Special Structures Design
<a href="#">SPR-1671</a>	An Evaluation of Michigan's Continuous Count Stations (CCS) Distribution	WMU	May-18	Asset Management
<a href="#">SPR-1671 Spotlight</a>	Enhancing Michigan's Traffic Monitoring Network with Intelligent Transportation Systems Sensors			Asset Management
<a href="#">SPR-1672</a>	Identifying Potential Workzone Countermeasures Using Connected-Vehicle and Driving Data	UM	May-18	Transportation Safety
<a href="#">SPR-1673</a>	Bridge Scour Technology Transfer	MTU	May-18	Bridge & Special Structures Design
<a href="#">SPR-1673 Spotlight</a>	Bridge Scour Conference Shares Knowledge and Innovations			Bridge & Special Structures Design
<a href="#">SPR-1674</a>	Implementation of UAVs for Assessment of Transportation Infrastructure – Phase II	MTU	Sep-18	Asset Management
<a href="#">SPR-1674 Spotlight</a>	Unmanned Aerial Vehicles Assess Highways and Bridges Faster with Reduced Cost and Risk			Asset Management
<a href="#">SPR-1675</a>	Side Path Application Criteria Development for Bicycle Use	Toole Design Group	Jun-18	Nonmotorized Planning
<a href="#">SPR-1675 Spotlight</a>	New bicycle sidepath safety principles to benefit designers, bicyclists and motorists			Nonmotorized Planning
<a href="#">SPR-1676</a>	Asset Management of Retaining Walls	UM	Mar-20	Bridge & Special Structures Design
<a href="#">SPR-1676 Spotlight</a>	New tools allow proactive management of Michigan's retaining walls			Bridge & Special Structures Design
<a href="#">SPR-1677</a>	Evaluation/Report for Collision Avoidance & Mitigation System (CAMS) on Winter Maintenance Trucks (WMT)	MSU	Oct-18	Transportation Safety
<a href="#">SPR-1678</a>	Updated Analysis of Michigan Traffic Inputs for Pavement ME Design	MSU	Oct-18	Pavement Design and Pavement Performance

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<a href="#">SPR-1678 Spotlight</a>	Improving traffic data inputs for mechanistic-empirical pavement design software			Pavement Design and Pavement Performance
<a href="#">SPR-1679</a>	UTC Center for Highway Pavement Preservation	MSU	Oct-18	Pavement Design and Pavement Performance
<a href="#">SPR-1680</a>	3D Highway Design Model Cost Benefit Analysis	WSP	Apr-19	Asset Management
<a href="#">SPR-1680 Spotlight</a>	3-D Models in MDOT Highway Projects Save Time and Money, Improve Process			Asset Management
<a href="#">SPR-1681</a>	Signal Performance Measures Pilot Implementation	AECOM	Dec-19	Systems, Maintenance & Operations
<a href="#">SPR-1681 Spotlight</a>	Pilot signal performance software improves driver travel times and traffic engineering safety.			Systems, Maintenance & Operations
<a href="#">SPR-1682</a>	Applying Multi-Beam Sonar for Inspection for Bridge Scour and Performance of Bridge	Ayres	Jul-19	Bridges & Special Structures Design
<a href="#">SPR-1682 Spotlight</a>	Remote-controlled vessel provides safe and accurate inspection for bridge scour			Bridges & Special Structures Design
<a href="#">SPR-1683</a>	Assessment of Michigan's Engineering Safety Program	MSU	Jul-19	Transportation Safety
<a href="#">SPR-1683 Spotlight</a>	Michigan draws from effective safety strategies nationwide to reduce road deaths and injuries			Transportation Safety
<a href="#">SPR-1683b</a>	Assessment of Transportation Systems Management and Operations (TSMO) for MDOT	MSU	Jul-19	Administration & Management
<a href="#">SPR-1684</a>	Best Practices for Modernizing MDOT Bridge Design Manual, Guides, and Policy Documentation	WSU	Dec-20	Bridges & Special Structures Design
<a href="#">SPR-1684 Spotlight</a>	Knowledge management system enables easy access to bridge policy and design updates			Bridges & Special Structures Design
<a href="#">SPR-1685</a>	Develop and Implement A Freeze Thaw Model Based Seasonal Load Restriction Decision Support Tool	MTU	Apr-20	Materials
<a href="#">SPR-1685 Spotlight</a>	Freeze-thaw Decision Tool Helps Determine Seasonal Load Restriction Dates			Materials
<a href="#">SPR-1686</a>	Effectiveness of Crash Fact/Safety Message Signs on Dynamic Message Signs	MSU	Aug-21	Transportation Safety
<a href="#">SPR-1686 Spotlight</a>	Insights into the Effective Use of Dynamic Message Signs for Traffic Safety			Transportation Safety
<a href="#">SPR-1687</a>	Accelerated Bridge Preservation Techniques	MSU	Apr-20	Bridges & Special Structures Design
<a href="#">SPR-1687 Spotlight</a>	New tool calculates the hidden costs of traffic delays during bridge work			Bridges & Special Structures Design

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<a href="#">SPR-1688</a>	Improved Calculation of Scour Potential on Cohesive Soils and Scour Susceptible Rock	MTU	Dec-20	Bridges & Special Structures Design
<a href="#">SPR-1689</a>	Development of a Michigan Specific VISSIM Protocol for Submissions of VISSIM Modeling	WSP	Sep-20	Intelligent Transportation Systems & Signal
<a href="#">SPR-1689 Spotlight</a>	Protocol manual helps guide traffic modeling projects			Intelligent Transportation Systems & Signal
<a href="#">SPR-1690</a>	Evaluating Long Term Capacity and Ductility of Carbon Fiber Reinforced Polymer Prestressing and Post Tensioning Strands	LTU	Aug-19	Bridges & Special Structures Design
<a href="#">SPR-1691</a>	Bridge Structural Analyses for Staged Construction and Constructability Reviews	WSU	May-20	Bridges & Special Structures Design
<a href="#">SPR-1691 Spotlight</a>	Structural analysis tools help streamline review of bridge construction plans			Bridges & Special Structures Design
<a href="#">SPR-1692</a>	Effectiveness of Green Strobes on Winter Maintenance Vehicles and Equipment	MSU	Aug-20	Work/Facility Safety & Security Emergency Management
<a href="#">SPR-1692 Spotlight</a>	Green warning lights make winter maintenance trucks more visible			Work/Facility Safety & Security Emergency Management
<a href="#">SPR-1692 Implementation Spotlight</a>	Green Strobes Added to MDOT Winter Maintenance Vehicles Increase Visibility			Work/Facility Safety & Security Emergency Management
<a href="#">SPR-1693a</a>	Michigan Transportation Construction Price Index	WMU	Jun-20	Construction
<a href="#">SPR-1693b</a>	Michigan Transportation Construction Price Index	WMU	Apr-21	Construction
<a href="#">SPR-1693 Spotlight</a>	Michigan Transportation Construction Price Index			Construction
<a href="#">SPR-1694</a>	Innovative Contracting Best Practices	WSP	Oct-21	Contracting & Contract Administration
<a href="#">SPR-1694-Spotlight</a>	Innovative contracting Provides Flexibility to Customize Project Results			Contracting & Contract Administration
<a href="#">SPR-1695</a>	Connected/Automated Vehicle and Infrastructure Research	UM	Jun-21	Systems, Maintenance & Operations
<a href="#">SPR-1696</a>	Reduction of pH Levels from Underdrain Outlets	LTU	Dec-21	Bridges & Structures

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<a href="#">SPR-1696 Spotlight</a>	Treatments for recycled concrete aggregate reduce pH of roadway drainage			Bridges & Structures
<a href="#">SPR-1697</a>	Evaluation of Camber and Deflections for Bridge Girders	WSU	Apr-21	Bridges & Structures
<a href="#">SPR-1697 Spotlight</a>	New MDOT design tool predicts how bridge beams will flex and settle over time			Bridges & Structures
<a href="#">SPR-1698</a>	Effects of Concrete Cure Time on Epoxy Overlay and Sealant Performance	WMU	Jun-22	Bridges & Structures
<a href="#">SPR-1698-Spotlight</a>	Revised concrete cure times reduce duration of bridge closures		Jul-23	Bridges & Structures
<a href="#">SPR-1699</a>	Recruit and Maintain/Upgrade a High-Tech Workforce for Emerging Technologies	CAR	Dec-21	Intelligent Transportation Systems & Signal
<a href="#">SPR-1699 Spotlight</a>	MDOT prepares its workforce for emerging transportation technologies			Intelligent Transportation Systems & Signal
<a href="#">SPR-1700</a>	Development of a Network-Level Evaluation Tool for Managing ITS Infrastructure	CSI	Jul-21	Intelligent Transportation Systems & Signal
<a href="#">SPR-1700-Spotlight</a>	ITS Evaluation Tool Calculates Value and Impact of Highway Technology			Intelligent Transportation Systems & Signal
<a href="#">SPR-1701</a>	Slope restoration on urban freeways	MSU	Aug-21	Rest Areas, Utilities & Landscaping
<a href="#">SPR-1701-Spotlight</a>	New standards foster successful roadside plantings			Rest Areas, Utilities & Landscaping
<a href="#">SPR-1702</a>	Development of Guidelines for the Use of Intermediate Diaphragms on Precast Concrete Beam Superstructures	WSU	Aug-21	Bridges & Structures
<a href="#">SPR-1702-Spotlight</a>	Measuring the effect and value of intermediate diaphragms on bridges			Bridges & Structures
<a href="#">SPR-1703</a>	Concrete Deterioration of Prestressed Bridge Beams	WMU	Sep-22	Bridges & Structures
<a href="#">SPR-1703-Spotlight</a>	Remedies for Concrete Bridge Beam Deterioration			Bridges & Structures
<a href="#">SPR-1704</a>	Measure the Operational Cost and Benefit of Speed Feedback Signs	MSU	Jan-22	Transportation Safety
<a href="#">SPR-1704 Spotlight</a>	Dynamic signs along Michigan's freeway ramps improve driver behavior			Transportation Safety

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<a href="#">SPR-1704 Implementation Spotlight</a>	Dynamic Speed Feedback Signs Effectively Improve Driver Behavior			Transportation Safety
<a href="#">SPR-1705</a>	Evaluating New Technologies for Roads Program Initiatives in Safety and Efficiency (ENTERPRISE) - Phase II	Athey Creek	Mar-22	Intelligent Transportation Systems & Signal
<a href="#">SPR-1705-Spotlight</a>	Transportation agencies pool ideas and resources for technology-enabled solutions			Intelligent Transportation Systems & Signal
<a href="#">SPR-1706</a>	US-23 Performance, Safety, and Perception Assessment	MSU	Jan-22	Transportation Safety
<a href="#">SPR-1706-Spotlight</a>	Evaluating safety and traffic improvements along Michigan's first flex route			Transportation Safety
<a href="#">SPR-1707</a>	Evaluation of 0.7 Inch Diameter Carbon Fiber Reinforced Polymer Pretensioning Strands in Prestressed Beams	LTU	Jun-22	Bridges & Structures
<a href="#">SPR-1708</a>	Synthesis of National Best Practices on Pedestrian and Bicycle Design, Guidance, and Technology Innovations	MSU	Jan-22	Transportation Safety
<a href="#">SPR-1708-Spotlight</a>	Updating best practices to keep pedestrians and bicyclists safe			Transportation Safety
<a href="#">SPR-1709</a>	Quantifying Effectiveness and Impacts of Digital Message Signs on Traffic Flow	WMU	Apr-22	Intelligent Transportation Systems & Signal
<a href="#">SPR-1709 Spotlight</a>	Benefits of dynamic message signs on driver behavior and traffic flow			
<i>SPR-1710</i>	<i>Training Tools for Effective Advancement of Digital Technologies for Construction Field Operations - No Report</i>	<i>MSU</i>		<i>Construction</i>
<a href="#">SPR-1711</a>	Innovative Contracting Risk Management Best Practices	RS&H	Mar-22	Contracting & Contract Administration
<a href="#">SPR-1711-Spotlight</a>	Risk management tools help MDOT deliver projects on time and on budget			Contracting & Contract Administration
<a href="#">SPR-1712</a>	Infrastructure Protection and Rehabilitation Response to High Lake Levels	Arcadis of Michigan, LLC	May-22	Environmental & Water Resources
<a href="#">SPR-1712-Spotlight</a>	Tools to protect coastal roadways from high water			Environmental & Water Resources
<a href="#">SPR-1713</a>	Integration of Unmanned Aerial Systems Data Collection into Day-to-Day Usage for Transportation Infrastructure	MTU	Jun-22	Mobility & Traffic Incidents
<a href="#">SPR-1713-Spotlight</a>	Integrating drones into MDOT's day-to-day traffic and asset management			Mobility & Traffic Incidents
<a href="#">SPR-1714</a>	Evaluating the Impacts of the 2017 Legislative Mandated Speed Limit Increases	MSU	Jan-23	Transportation Safety

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<a href="#">SPR-1716</a>	Assessing System Performance of the Michigan Trunkline: Measures and Analytical Procedures for Planning and Operations	MSU	Jan-23	Travel Demand Forecasting
<a href="#">SPR-1716-Spotlight</a>	Measuring Michigan's Highway Network Performance is Critical for Planning			Travel Demand Forecasting
<a href="#">SPR-1717</a>	Competitive Bidding in Construction Contracts	WMU	Dec-22	Contract Administration
<a href="#">SPR-1718</a>	Analysis and Deployment of an Unmanned Traffic Management System in Michigan	Airspace Link, Inc	Aug-23	Aviation
<a href="#">SPR-1719</a>	Developing a Consistent Data Driven Methodology to Multimodal, Performance Based, and Context Sensitive Design	MSU	Dec-22	Rest Areas, Utilities & Landscaping
<a href="#">SPR-1719-Spotlight</a>	New tool helps MDOT customize roadway designs for all users			Rest Areas, Utilities & Landscaping
<a href="#">SPR-1720</a>	Quantify the Impact of Super Single (Wide-Base) Tires on Pavement Performance in Michigan	MTU	Jan-23	Pavements & Materials
<a href="#">SPR-1720-Spotlight</a>	Understanding the impacts of wide base tires on Michigan's pavements			Pavements & Materials
<a href="#">SPR-1721</a>	Safety Enhancements at Short-Storage-Space Railroad Crossings	TX A&M Transportation Institute	Mar-23	Freight Rail
<a href="#">SPR-1721-Spotlight</a>	Enhancing safety at short-storage railroad crossings			Freight Rail
<a href="#">SPR-1722</a>	Evaluation of MDOT's Long-Life Pilot Projects	MSU	Apr-23	Pavements & Materials
<a href="#">SPR-1722-Spotlight</a>	Evaluating Pavements Designed for Longer Life			Pavements & Materials
<a href="#">SPR-1723</a>	Testing Protocol, Data Storage and Recalibration for Pavement-ME Design	MSU	Oct-23	Pavements & Materials
<a href="#">SPR-1723-Spotlight</a>	Refining data and tools to design cost-effective, sustainable pavement			Pavements & Materials
<a href="#">SPR-1724</a>	Right of Way Mapping Conversion to GIS	MSU	Aug-23	Real Estate & Permits
<a href="#">SPR-1724-Spotlight</a>	Modernizing right of way maps with geographic information system technology			Real Estate & Permits
<a href="#">SPR-1725</a>	Evaluating the Performance and Safety Effectiveness of Roundabouts - An Update	MSU	Jun-23	Transportation Safety
<a href="#">SPR-1725-Spotlight</a>	Maximizing the Safety, Economic and Environmental Benefits of Michigan Roundabouts			Transportation Safety
<a href="#">SPR-1726</a>	Eastern Massasauga (Sistrurus Catenatus) Road Ecology and Population Dynamics in Michigan	MSU	Jul-24	Environment and Water Resources
<a href="#">SPR-1726-Spotlight</a>	Eastern massasauga rattlesnake's use of roadside space in southern Michigan		Sep-24	Environment and Water Resources

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<a href="#">SPR-1727</a>	Determining State and Federal Transportation Responsibilities to Residents on Islands	MSU	Jun-23	Local Transit
<a href="#">SPR-1727-Spotlight</a>	Evaluating Michigan's ferry services, funding and policies to support island access		Sep-23	Local Transit
<a href="#">SPR-1728</a>	Effective Bridge Deck Weather Warning Technologies	MSU	Apr-24	Intelligent Transportation Systems & Signals
<a href="#">SPR-1728-Spotlight</a>	Alerting drivers to unsafe winter conditions on Michigan bridges			Intelligent Transportation Systems & Signals
<a href="#">SPR-1730</a>	Repair of Bridge Deck Fascias	WSU	Sep-23	Bridges and Structures
<a href="#">SPR-1730-Spotlight</a>	New methods for preventing and repairing bridge deck fascia damage			Bridges and Structures
<i>SPR-1731</i>	<i>Operational Baseline and Structural Health Monitoring for the 2nd Avenue Network Arch Bridge</i>	<i>WMU</i>		<i>Bridges and Structures</i>
<a href="#">SPR-1732</a>	Enhanced Bridge Cost Estimating	WSU	Mar-24	Bridges and Structures
<a href="#">SPR-1733</a>	Establish Policies and Procedures for use of Subgrade Stabilization in Michigan	LTU	Mar-24	Pavements and Materials
<a href="#">SPR-1734</a>	Effective Pedestrian/Non-Motorized Crossing Enhancements Along Higher Speed Corridors	WMU	Oct-23	Transportation Safety
<a href="#">SPR-1734-Spotlight</a>	Making high-speed corridors safer for pedestrians and cyclists			Transportation Safety
<a href="#">SPR-1735</a>	Construction Digital Delivery Technology Scan	CRAFT	Jul-24	Surveys and Automated Design
<a href="#">SPR-1735-Spotlight</a>	Enhancing MDOT's digital vision to support construction processes		Dec-24	Surveys and Automated Design
<a href="#">SPR-1736</a>	Corridor and Systemwide Application of Performance Based Practical Design	WSP	Jan-24	Project Development
<a href="#">SPR-1736-Spotlight</a>	Design flexibility produces more cost-effective transportation projects			Project Development
<i>SPR-1737</i>	<i>Evaluation of MDOT's Methodologies for both Quantifying Pavement Distress and Modeling Pavement Performance for Life-Cycle Cost and Remaining Service Life Estimation Purposes</i>	<i>MSU</i>		<i>Pavements and Materials</i>
<a href="#">SPR-1738</a>	Utilizing Video Analytics with Connected Vehicles for Improved Safety	Kimley Horn	May-24	Intelligent Transportation Systems
<a href="#">SPR-1738-Spotlight</a>	Improving Road Safety with Video Analytics Technology			Intelligent Transportation Systems
<a href="#">SPR-1740</a>	Electronic Water Level Sensors for Monitoring Scour Critical Structures	UM	Feb-25	Bridges and Structures
<a href="#">SPR-1741</a>	Leveraging Crowd-sourced Data in Planning, Design, Analysis, and Evaluation of Pedestrian and Bicycle Traffic	UC Denver	Oct-24	Non-Motorized Planning & Development



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<a href="#">SPR-1741-Spotlight</a>	Using crowdsourced data to estimate nonmotorized traffic volumes			
<a href="#">SPR-1742</a>	Multimodal Aircraft Charging Station Deployment	C&S Engineering	Oct-24	Aviation
<a href="#">SPR-1742-Spotlight</a>	Developing infrastructure at airports to charge electric aircraft and vehicles			Aviation
<i>SPR-1743</i>	<i>Improving Cost Estimation and Budget Planning with New Michigan Highway Construction Cost Index</i>	WMU		<i>Project Development</i>
<i>SPR-1744</i>	<i>Examination of Lighting Practices at Crosswalks</i>	WMU		<i>Transportation Safety</i>
<i>SPR-1745</i>	<i>Capacity Prediction of Repaired and Unrepaired Bridge Beams with Deteriorated Ends</i>	WMU		<i>Bridges and Structures</i>