

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

May 2025

*Report numbers that are italicized are unavailable

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

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

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SPR-039	Concrete Durability Study: Accelerated Scaling Studies on Concrete Pavement Surfaces	E. A. Finney	Aug-42	Pavement Design & Pavement Performance
SPR-040	Progress Report on Reflectorized Sign Material Investigation	E. A. Finney	Nov-42	Materials
SPR-041	A Digest of the Michigan Test Road for American Concrete Institute	E. A. Finney	Dec-42	Roadway Design
SPR-042	Discoloration Phenomenon in Beaded Reflectorized Highway Sign Materials	C. C. Rhodes	Jan-43	Materials
SPR-043	Research Activities, 1939 – 1943	E. A. Finney	May-43	Administration & Management
SPR-044	Color in Concrete Pavements	E. A. Finney	May-43	Pavement Design & Pavement Performance
SPR-045	Design of Concrete Resurfacing	E. A. Finney	May-43	Pavement Design & Pavement Performance
SPR-046	Design Recommendations for Industrial Express Highway	E. O. Finney, W. O. Fremont	Jun-43	Roadway Design
SPR-047	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
SPR-048	Michigan's Experiences in the Use of Air Entraining Materials for Concrete Pavement Construction	E. A. Finney	Oct-43	Pavement Design & Pavement Performance
SPR-049	"Sealz" Joint Seal Study	E. A. Finney, C. C. Rhodes	Jan-44	Pavement Design & Pavement Performance
SPR-050	Report on Condition Survey of Concrete Capping Projects in Michigan	E. A. Finney, A. Matthews	Mar-44	Pavement Design & Pavement Performance
SPR-051	The Research Laboratory	E. A. Finney	Mar-44	Administration & Management
SPR-052	Compilation of Design and Construction Data for Concrete Pavements on the State Trunkline System	E. A. Finney	Jun-44	Pavement Design & Pavement Performance
SPR-053	Para-Plastic Joint Sealing Compounds	E. A. Finney	Jun-44	Pavement Design & Pavement Performance
SPR-054	Air-Entrained Concrete	E. A. Finney	Jun-44	Pavement Design & Pavement Performance
SPR-055	Report on Research Laboratory – 1943-1944	E. A. Finney	Jun-44	Administration & Management
SPR-056	Study of Blowups on Bituminous-Capped Pavements	E. A. Finney	Jul-44	Pavement Design & Pavement Performance
SPR-057	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
SPR-058	Study of Concrete Pavement Cracking on Project 49-7, C1	E. A. Finney	Sep-44	Pavement Design & Pavement Performance

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SPR-059	Preliminary Progress Report on Design Projects Michigan Test Road	E. A. Finney	Oct-44	Roadway Design
SPR-060	Research Laboratory Report for Biennium 1942-1944	E. A. Finney	Oct-44	Administration & Management
SPR-061	Microscopic Study of Scaled and Unscaled Concrete	E. A. Finney	Nov-44	Pavement Design & Pavement Performance
SPR-062	Recommendations for the Design of Concrete Pavement	E. O. Finney, W. O. Fremont	Nov-44	Pavement Design & Pavement Performance
SPR-063	Use of Vinsol Resin Cement in Concrete Bridge Structures	C. C. Rhodes	Nov-44	Bridge & Special Structures Design
SPR-064	Pavement and Subgrade Moisture Michigan Test Road	C. C. Rhodes	Dec-44	Roadway Design
SPR-065	Hardening of Wood by Chemical Processes	C. C. Rhodes	Dec-44	Materials
SPR-066	Concerning Changes in Senate Bill No. 102 Relative to Motorbuses	E. A. Finney	Feb-45	Multi-Modal
SPR-067	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
SPR-068	The Design of Concrete Pavements for Post War Construction	E. A. Finney	Mar-45	Pavement Design & Pavement Performance
SPR-069	Determination of Benzene in Bituminous Materials	B. W. Pocock	Apr-45	Materials
SPR-070A	Asphaltic Oil-Latex Joint-Sealing Compound	B. W. Pocock	Apr-45	Pavement Design & Pavement Performance
SPR-071	Report on Research Laboratory, 1944-1945	E. A. Finney	Jul-45	Administration & Management
SPR-072	A Model Study of Slab Action Concrete Pavements	L. D. Childs	Jul-45	Pavement Design & Pavement Performance
SPR-073	Inspection of Concrete Pavements in the Province of Ontario, Canada	E. A. Finney	Jun-45	Pavement Design & Pavement Performance
SPR-074	The Application of Chloride Salts to Concrete Pavements for Ice Control	C. C. Rhodes	Aug-45	Materials
SPR-074A	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
SPR-075	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
SPR-076	Investigations of Anti-Freeze Preparations	B. W. Pocock	Dec-45	Materials
SPR-077	Investigations Kapco Membrane Curing Compounds	B. W. Pocock	Dec-45	Materials

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

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SPR-097	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
SPR-098	Compressed Wood for Expansion Joint Fillers	B. W. Pockock	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>
SPR-100	Report on Research Laboratory, 1946 – 1947	E. A. Finney	Jul-47	Administration & Management
SPR-101	“Sealz Melter” Heating Kettle for Rubber Joint Sealing Compound	E. A. Finney	Sep-47	Pavement Design & Pavement Performance
SPR-102	Liquid Chloride Application Study	E. A. Finney	Sep-47	Materials
SPR-103	Rubber Compound Heating Kettle, Chausse Model R-115	L. L. Peterson	Sep-47	Materials
SPR-104	Progress Report on Load Deflection Tests Dealing with Length and Size of Dowels	E. A. Finney, W. O. Fremont	Nov-47	Materials
SPR-105	Cracking of Concrete Patches on Project 49-7, C1 US-2 North of St. Ignace	E. A. Finney	Dec-47	Pavement Design & Pavement Performance
SPR-106	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
SPR-107	Consolidation of Porous Backfill	R. Greenman	Jan-48	Materials
SPR-108	Detroit Manufactured Brick for Catch Basins and Manholes	E. A. Finney	Mar-48	Materials
SPR-109	The Use and Treatment of Granular Backfill	R. Greenman	Mar-48	Materials
SPR-110	Deterioration and Restoration of Concrete Bridges on the State Trunkline System	E. A. Finney, C. C. Rhodes	Sep-48	Bridge & Special Structures Design
SPR-111A	Study of New American Decalcomania Reflective Material	C. C. Rhodes, L. L. Peterson	Mar-48	Materials
SPR-112	More Durable Concrete by Air Entrainment	E. A. Finney	Apr-48	Pavement Design & Pavement Performance
SPR-113	A Study of Fabrics for Membrane and Joint Waterproofing	L. L. Peterson	Jun-48	Pavement Design & Pavement Performance
SPR-114	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
SPR-115	Operational Comparison of Premixed and M.S.H.D. Specification Materials for ReflectORIZED Centerlines	L. L. Peterson, F. Ballew	Aug-48	Materials
SPR-116	Shoulder Construction Practice in Michigan	E. A. Finney	Nov-48	Construction

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

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SPR-138	Condition Study of Menominee Tourist Lodge	B. W. Pockock	Nov-49	Tourism
SPR-139	Neoprene Premolded Joint Seal Installation	E. A. Finney	Nov-49	Pavement Design & Pavement Performance
SPR-140	Progress Report on Design Project Michigan Test Road	H. C. Coons	Nov-49	Roadway Design
SPR-141	Study of Corrosion Inhibitors Added to De-icing Chemicals	C. C. Sisler	Dec-49	Materials
SPR-142	Photometric Tests for Reflective Materials	B. W. Rhodes	Dec-49	Materials
SPR-143	Skidding Accidents Occurring on Stone Sand Concrete Pavements, August 1948 to August 1949	E. A. Finney	Dec-49	Pavement Design & Pavement Performance
SPR-144	Experience with Air-Entraining Concrete in New Jersey	C. C. Rhodes	Dec-49	Pavement Design & Pavement Performance
SPR-145	Curing Concrete Pavements with Membranes	C. C. Rhodes	Aug-50	Pavement Design & Pavement Performance
SPR-146	Design and Construction of Joints in Concrete Pavement Surfaces	W. Van Breemen, E. A. Finney	Feb-50	Pavement Design & Pavement Performance
SPR-147	Treated Sawdust for Skid Control on Icy Pavements	C. C. Rhodes	Mar-50	Materials
SPR-148	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
SPR-149	Pavement Roughness Surveys	E. A. Finney, L. D. Childs	Apr-50	Pavement Design & Pavement Performance
SPR-150	Snow Fence Material Investigation	E. A. Finney	Jun-50	Materials
SPR-151	Load Deflection Tests on Corrugated Metal Sections	M. J. Huber, L. D. Childs	Jun-50	Bridge & Special Structures Design
SPR-152	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
SPR-153	Evaluation of Bituminous Concrete Surfaces on Stabilized Gravel Base	E. A. Finney, O. L. Stokstad	Aug-50	Pavement Design & Pavement Performance
SPR-154	Inspection of Marshall Creek Aggregate	C. C. Rhodes	Oct-50	Materials
SPR-155	Michigan's Experience in the Use of White-Pigmented Membrane Curing Compound	C. C. Rhodes	Nov-50	Materials
SPR-156	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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SPR-157	ASTM 1950 Cooperative Check Tests on Pavement Marking Paints	E. A. Finney, B. W. Pocock	Mar-51	Materials
SPR-158	Study of 1950 Traffic Paint Operations	B. W. Pocock	Mar-51	Asset Management
SPR-159	Report on Maryland Road Test One-MD	E. A. Finney	Mar-51	Roadway Design
SPR-160	Comparative Field Study of Different Traffic Paints and Striping Practice	B. W. Pocock	Oct-51	Materials
SPR-161	Progress Report – Neoprene PreMolded Joint Seal Study	B. W. Pocock	Jun-51	Pavement Design & Pavement Performance
SPR-162	Stripping Tests on 18 Asphalt Cements	L. A. Fickes, E. Airola	Oct-51	Pavement Design & Pavement Performance
SPR-163A	A Laboratory Study of Rubber-Asphalt Mixtures for Pavements	L. A. Fickes	Oct-51	Pavement Design & Pavement Performance
SPR-164	Vibrated Concrete Pavement in Michigan	E. A. Finney	Nov-51	Pavement Design & Pavement Performance
SPR-165	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat	E. A. Finney	Dec-51	Asset Management
SPR-166	Michigan Test on Rolled Beam Bridge Using H20-S16 Loading	G. M. Foster, L. D. Childs	Dec-51	Bridge & Special Structures Design
SPR-167	A Discussion of the Principles of Glass Bead Reflectorization	C. C. Rhodes, B. W. Pocock	Dec-51	Materials
SPR-168	American Steel and Wire Company Alternate 3 – By 12-in. Mesh for Concrete Pavements	E. A. Finney	Jan-52	Pavement Design & Pavement Performance
SPR-169	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
SPR-170	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
SPR-171	The 1951 Proposed AASHTO Policy on Motor Vehicle Operation	L. D. Childs	Feb-52	Administration & Management
SPR-172	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
SPR-173	Manual for Reflectometer Operation and Maintenance	C. C. Rhodes, B. W. Preston	Feb-52	Systems, Maintenance & Operations
SPR-174	Mid-winter Inspection of Paper Snow Fence Installations, 1951-1952	E. A. Finney, W. C. Broughton	Mar-52	Materials
SPR-175	Concrete Pavement Joint Saw-Cutting and Sealing Experiment, US-27	B. W. Pocock, Wm. Martin	Apr-52	Pavement Design & Pavement Performance
SPR-176	Investigation of Klumpp Aggregates	C. C. Rhodes, M. G. Brown	Apr-52	Materials

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

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SPR-197	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
SPR-197A	Experimental Patching of Broken Concrete at Expansion Joints – US-16, Nunica to Fruitport	L. A. Fickes	Dec-53	Pavement Design & Pavement Performance
SPR-197B	A Condition Survey of Experimental Contract Resealing and Patching Project, US-16 Nunica to Fruitport	L. A. Fickes	Feb-54	Pavement Design & Pavement Performance
SPR-198	Study of the Effectiveness of Hook Bolts for Use as Tie Bars for Longitudinal Joints	G. R. Cudney	Nov-53	Pavement Design & Pavement Performance
SPR-199	Paper Snow Fence Installations 1952 – 1953	W. C. Broughton	Dec-53	Materials
SPR-200	A Study of the Rigidity of Various Dowel Bar Assemblies	L. T. Oehler, G. R. Cudney, R. D. Behr	Dec-53	Materials
SPR-201	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
SPR-202	Cracking Experience of Concrete Pavements Containing Slag Coarse Aggregate – Results of 1953 Survey	E. A. Finney, L. T. Oehler	Dec-53	Materials
SPR-203	Special Study of Tie Wires For Snow Fence Construction	G. R. Cudney	Dec-53	Materials
SPR-204	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
SPR-205	Evaluation of Metal Primers and Wood Sealers	B. W. Preston	Feb-54	Materials
SPR-206	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
SPR-207	Condition Survey, US-2, Wakefield to Iron River, U.P.	Wm. Broughton, E. Bessonon, A. Smith	Apr-54	Pavement Design & Pavement Performance
SPR-208	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
SPR-209	A Study of the Relative Effectiveness of Methods for End Stiffening of Corrugated Metal Culverts	G. Cudney	May-54	Geotechnical & Foundation Design
SPR-210	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
SPR-211	Tensile Strength Characteristics of Hook Bolts Furnished by Jones & McKnight, Inc.	E. A. Finney	Jul-54	Materials
SPR-212	Michigan's Experience in the Use of Pozzolite and HP-7 Admixtures for Concrete Pavement Construction	Research Laboratory	Jul-54	Pavement Design & Pavement Performance
SPR-213	Experiment with Vinsol Resin and HP-7 Admixtures Under Cold Weather Concreting Conditions	E. A. Finney	Aug-54	Pavement Design & Pavement Performance
SPR-214	New Impact Tester for Reflector Buttons	B. W. Preston	Aug-54	Asset Management

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SPR-215	Experimental Capping Study, Construction Project F 33-54, C4 on US-127, Progress Report No. 1	Wm. Broughton	Dec-54	Pavement Design & Pavement Performance
SPR-216	Application of Absorption Spectroscopy to Highway Testing and Research	C. Rhodes	Oct-54	Materials
SPR-217	Measuring Traffic Paint Abrasion with Beta Rays	W. Pocock	Nov-54	Materials
SPR-218	Experimental Resealing of Joints on M-83 Saginaw County, Projects 73-25, C3 & C4	L. A. Fickes	Jan-55	Pavement Design & Pavement Performance
SPR-219	Vibration and Deflection of Rolled Beam and Plate Girder Type Bridges	G. Foster, L. T. Oehler	Jan-55	Bridge & Special Structures Design
SPR-220	Performance of Hot-Poured Rubber-Asphalt Joint Sealing Compounds	L. A. Fickes	May-55	Pavement Design & Pavement Performance
SPR-221	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>
SPR-223	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
SPR-224	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
SPR-225	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
SPR-226	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
SPR-227	ASTM 1954 Cooperative Traffic Paint Tests	C. C. Rhodes, B. W. Pocock	Jun-55	Materials
SPR-228	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
SPR-229	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
SPR-230	Evaluation of the Lateral Stability of Posts for Deep Beam Guard Rail	G. R. Cudney	Jun-55	Materials
SPR-231	Study of Premolded Rubber Base Plate for Joints	L. A. Fickes	Jun-55	Pavement Design & Pavement Performance
SPR-232	Static Load Deflection Tests on Various Types of Deep Beam Guard Rails	G. R. Cudney	Jul-55	Materials
SPR-233	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
SPR-234	Investigation of Bichler Brothers Gravel	M. G. Brown	Jul-55	Materials

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SPR-235	Compilation of Design and Construction Data for Concrete Pavement on the State Trunkline System	MDOT	Oct-55	Pavement Design & Pavement Performance
SPR-236	A Comparison of Beaded Paint and Sheet Reflectorized Stop Signs (Red)	B. W. Preston	Oct-55	Materials
SPR-237	A Study of the Rigidity of the Union Steel Products Dowel Bar Joint Assembly	E. A. Finney	Aug-55	Pavement Design & Pavement Performance
SPR-238	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
SPR-239	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
SPR-239A	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
SPR-240	Procuring Traffic Paint on the Basis of Performance Tests	C. C. Rhodes	Nov-55	Materials
SPR-241	1954 Performance Tests on Traffic Paints	C. C. Rhodes	Nov-55	Materials
SPR-242	Abstracts from Michigan's Studies of Slipperiness of Concrete Pavements Constructed with Stone Sand as the Fine Aggregate	E. A. Finney	Oct-55	Materials
SPR-243	Michigan State Highway Department Photometric Test for Reflective Materials	B. W. Preston	Dec-55	Asset Management
SPR-244	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
SPR-245	Traffic Paints and Their Use in Pavement Marking	C. C. Rhodes	Dec-55	Materials
SPR-246	Michigan's Experiment in Snow and Ice Removal on Highways by Radiant Heat, Eighth Progress Report	E. A. Finney	Jan-56	Asset Management
SPR-247	Performance Tests on Experimental Black Traffic Paints, First Progress Report	A. J. Permoda, W. Martin	Oct-56	Materials
SPR-248	Performance of Hot-Pour Rubber-Asphalt Joint Sealing Compounds in 50-ft. Spaced Joints	L. A. Fickes	Feb-56	Pavement Design & Pavement Performance
SPR-249	Data Summaries on Nuclear Methods Reported on Soils	B. W. Pocock	Dec-55	Systems, Maintenance & Operations
SPR-250	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
SPR-251	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
SPR-252	Application of A Beta-Ray Backscatter Thickness Gage to Traffic Paint Wear Studies	B. W. Pocock	Jan-56	Materials
SPR-253	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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SPR-254	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
SPR-255	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
SPR-256	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
SPR-257	Third Condition Survey of Experimental Contract Resealing and patching, US-16, Nunica to Fruitport	L. A. Fickes	Apr-56	Pavement Design & Pavement Performance
SPR-258	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
SPR-259	Rigidity Tests on LaCledé Dowel Bar Joint Assembly	L. T. Oehler	Jun-56	Pavement Design & Pavement Performance
SPR-260	Protective Coatings for Structural Steel	A. J. Permoda, W. Martin	Jul-56	Materials
SPR-261	An Analysis of Certain Mathematical Assumptions Underlying the Design and Operation of Gamma-Ray Surface Density Gages	B. W. Pocock	Jul-56	Materials
SPR-262	Flame Photometric Determination of Sodium, Potassium, Magnesium and Iron Oxides in Portland Cements	P. Biefeld	Jul-56	Materials
SPR-263	Metcoseal: A Protective Coating for Structural Steel	A. J. Permoda, W. Martin	Aug-56	Materials
SPR-264	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
SPR-265	Load Deflection and Tensile Tests on Standard Type Steel Beam Guard Rail	G. R. Cudney	Oct-56	Materials
SPR-266	Cracking of Slag Aggregate Concrete on Gratiot Avenue, Detroit	E. A. Finney	Oct-56	Materials
SPR-267	1956 Performance Tests on White and Yellow Traffic Paint, First Progress Report	A. J. Permoda, Wm. Martin, M. H. Janson	Oct-56	Materials
SPR-268	A Field Study of Joint and Crack Resealing Methods and Materials	L. A. Fickes, C. C. Rhodes	Nov-56	Pavement Design & Pavement Performance
SPR-269	1956 Traffic Paint Striping on US-25, Gratiot Avenue, Detroit	A. J. Permoda	Nov-56	Materials
SPR-270	1955 Performance Tests on White and Yellow Traffic Paint	A. J. Permoda, Wm. Martin	Nov-56	Materials
SPR-271	A Comparative Study of the Drop-In and Overlay Methods of Reflectorizing Traffic Paints	C. C. Rhodes	Nov-56	Materials
SPR-272	Vibration Susceptibilities of Various Highway Bridge Types	L. O. Oehler	Jan-57	Bridge & Special Structures Design
SPR-273	Investigation of Perma-line Thermoplastic Pavement Marking Material	A. J. Permoda	Feb-57	Materials

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

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

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SPR-315	Pull-Out Tests on Four Types of Expansion Sleeve Tie Bar Devices	R. E. Hooper, G. R. Cudney	Sep-59	Materials
SPR-316	The Michigan Nuclear Combination Density-Moisture Surface Gage	B. W. POCOCK, L. W. Smith, W. H. Schwartzje, P. F. Hesse	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>
SPR-318	1958 Performance Tests on White and Yellow Traffic Paints	A. J. Permoda, Wm. Martin, M. H. Janson	Oct-59	Materials
SPR-319	1959 Road Test on 1,000 Gallons of 3M Centerlite Prebeaded White Traffic Paint	A. J. Permoda	Dec-59	Materials
SPR-320	Summary Report on Methods of Glass Bead Reflectorization of Traffic Paints	A. J. Permoda	Dec-59	Materials
SPR-321	Latex Modified Mortar in the Restoration of Bridge Structures	S. M. Cardone, M. G. Brown, A. A. Hill	Dec-59	Bridge & Special Structures Design
SPR-322	The Michigan Test Road Durability Project	C. C. Rhodes, E. A. Finney	Jan-60	Roadway Design
<i>SPR-323</i>	<i>No Report</i>			
SPR-324	1959 Summaries of Pavement Roughness	O. L. Lindy, P. Milliman	Mar-61	Pavement Design & Pavement Performance
SPR-325	Roughness Measurements of Bridge Decks and Approaches	R. E. Hooper, L. T. Oehler	Mar-60	Bridge & Special Structures Design
SPR-326A	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
SPR-327	Transverse Joint Problems	E. A. Finney	Apr-60	Pavement Design & Pavement Performance
SPR-328	Comparative Tests of Beaded Paint and Sheet Materials for Sign Reflectorization	C. C. Rhodes, A. J. Permoda, M. H. Janson	May-60	Materials
SPR-329	Design Considerations for Steel Reinforcement in Continuously Reinforced Pavement	G. R. Cudney	Apr-60	Pavement Design & Pavement Performance
SPR-330	Design Considerations for Reinforcement and Joint Spacing for Pavements with Small-Radius Curves	G. R. Cudney	May-60	Pavement Design & Pavement Performance
SPR-331	Experimental Concrete Capping on Groesbeck Highway: Project F50-7, C5. Third Progress Report	O. L. Lindy	May-60	Pavement Design & Pavement Performance
SPR-332	Deterioration of Concrete Highways and Bridges Containing Big Cut Pit Aggregates	O. L. Lindy, M. G. Brown	Jun-60	Bridge & Special Structures Design
SPR-333	The Relative Effects of Commercial Vehicles on Concrete Pavements	L. T. Oehler, P. Milliman	Aug-60	Pavement Design & Pavement Performance

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SPR-334	Study of Premolded Rubber and Polyvinyl Chloride Base Plate for Joints	D. F. Simmons, C. C. Rhodes	Jun-60	Pavement Design & Pavement Performance
SPR-335	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
SPR-336	Flasher Brightness at Selected Intersections	M. H. Janson, G. M. Smith	Jun-60	Transportation Safety
SPR-337	Roughness Evaluation of Railroad Crossings in Battle Creek	R. Hooper	Jul-60	Multi-Modal
SPR-338	Granco Steel Guard Rail Post (6-1/2 x 3-1/2 x 8.64 "S" Section)	G. R. Cudney	Jul-60	Materials
SPR-339	Quantity and Distribution of Calcium Chloride Within Stock-Piles of Treated Aggregate	R. C. Mainfort, F. Copple	Aug-60	Materials
SPR-340	1959 Traffic Paint Performance Tests: Cooperative Tests with City of Detroit	A. J. Permoda	Aug-60	Materials
SPR-341	Inspection of Fiberglass Reinforced Plastic Overhead Sign Support Structure	G. R. Cudney	Aug-60	Bridge & Special Structures Design
SPR-342	Lateral Stability of Posts for Deep Beam Guard Rail: Second Progress Report	G. R. Cudney	Sep-60	Materials
SPR-343	Performance of Metallic and Non-Metallic Base Plates of Joints	O. L. Lindy, L. T. Oehler	Sep-60	Pavement Design & Pavement Performance
SPR-344	An Evaluation of Hinged Wire Mesh Reinforcement for Concrete Pavement	R. Hooper	Sep-60	Pavement Design & Pavement Performance
SPR-345	Storage and Handling Properties of a Synthetically Granulated Salt	R. C. Mainfort, J. D. Shackelford	Sep-60	Materials
SPR-346	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
SPR-347	Comparison of Clear and White Polyethylene Sheets for Concrete Curing	R. H. Merrill, M. G. Brown	Oct-60	Bridge & Special Structures Design
SPR-348	1959 Performance Tests on White And Yellow Traffic Paints	A. J. Permoda, M. H. Janson, Wm. Martin	Oct-60	Materials
SPR-349	Performance of Non-Metallic Base Plates, Fourth Progress Report	L. T. Oehler, O. L. Lindy	Nov-60	Pavement Design & Pavement Performance
SPR-350	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
SPR-351	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
SPR-352	Lightning Damage to Concrete Pavement: US-10 Bypass, Midland (Project 56044, C9)	O. L. Lindy, J. R. Darlington	Mar-61	Pavement Design & Pavement Performance
SPR-353	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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Report Number	Title	Author	Publication Date	Category
SPR-354	Investigation of Thorite Filling and Patching Compound for Sealing Core Holes In Box Type Prestressed Beams	M. G. Brown	Dec-60	Materials
SPR-355	Longitudinal Cracking on I-75 – US-23, Genesee County	O. L. Lindy	May-61	Pavement Design & Pavement Performance
SPR-356	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>
SPR-358	Field and Laboratory Evaluation of the Michigan Nuclear Gage	R. C. Mainfort, J. H. DeFoe	Aug-61	Systems, Maintenance & Operations
SPR-359	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
SPR-360	Strength Comparison of Steel Sign Posts	H. C. Brunke	Jun-61	Materials
SPR-361	Protective Coatings for Structural Steel, Second Progress Report	A. J. Permoda, R. L. Snider	Sep-61	Materials
SPR-362	Summary Report on Skid-Correction Program for High-Accident Intersections	R. H. Merrill, A. Phillipich	Jul-61	Pavement Design & Pavement Performance
SPR-363	Performance of a Fiberglass Reinforced Plastic Experimental Overhead Sign Support Structure	G. R. Cudney	Sep-61	Bridge & Special Structures Design
SPR-364	Preventive Measures for Obtaining Scale-Free Concrete Bridge Structures	E. A. Finney	Dec-61	Bridge & Special Structures Design
SPR-365	Continuously Reinforced Bituminous Resurfacing, Detroit Industrial Expressway (I-94), West of Ypsilanti	O. L. Lindy	Jan-62	Pavement Design & Pavement Performance
SPR-366	1960 Summary of Pavement Roughness	O. L. Lindy, P. Milliman	Nov-61	Pavement Design & Pavement Performance
SPR-367	Aggregate Source and Popout Frequency, I-94 from Marshall to Jackson	O. L. Lindy	Nov-61	Materials
SPR-368	Michigan's Test Road for Transverse Joints, I-96 from Meridian Road to Wallace Road	L. T. Oehler	Nov-61	Roadway Design
SPR-369	1960 Performance Tests on White and Yellow Traffic Paints	A. J. Permoda, R. L. Snider, M. H. Janson	Nov-61	Materials
SPR-370	A Symposium on the Michigan Nuclear Gage for Soils	B. W. Pocock, R. E. Hanna, W. H. Schwartje,	Oct-62	Systems, Maintenance & Operations
SPR-371	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
SPR-372	Failure of Stressed Concrete Bridge Deck Beams (X01 of 11016), I-94 over NYCRR	G. R. Cudney	Feb-62	Bridge & Special Structures Design
SPR-373	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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SPR-374	Cracks in Retaining Wall on James Couzens Extension of Lodge Expressway	G. R. Cudney	Feb-62	Bridge & Special Structures Design
SPR-375	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
SPR-376	Lenz's Proprietary Paints for Creosoted Wood Posts and for Structural Steel	A. J. Permoda	Mar-62	Materials
SPR-377	Influence of the Minus 200 Fraction on Engineering Properties of Soil and Gravel	R. C. Mainfort, J. M. Portigo	May-62	Environmental
SPR-378	Inspection of Mixer Efficiencies at Central Concrete Mixing Plants by Means of Gamma Rays	B. W. POCOCK, W. H. Schwartje, C. A. Zapata, P. F. Hanes	Feb-63	Materials
SPR-379	Propane-Fueled Warning Lights	M. H. Janson, G. M. Smith	Apr-62	Materials
SPR-380	Rustake Glare-Proof Fencing	B. W. Pockock	Apr-62	Materials
SPR-381R	Evaluation of Armor Speed Finish and Gun-Tex as Protective Coatings for Concrete Structures	C. C. Rhodes, B. W. Pockock	Apr-63	Pavement Design & Pavement Performance
SPR-382	Woven Asbestos Sheet Packing for Bridge Post Pads	L. T. Oehler, H. C. Brunke	Apr-62	Bridge & Special Structures Design
SPR-383	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
SPR-384	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
SPR-385	Investigation of Low Test Strength on Concrete from Project EBI 17034, C1UN	M. G. Brown	May-62	Pavement Design & Pavement Performance
SPR-386	Reinforced Polyethylene Sheeting for Curing Concrete (Griffolyn Co. Films)	A. J. Permoda	Jun-62	Pavement Design & Pavement Performance
SPR-387	Evaluation of Initial Striping on Concrete Pavements, 1960 Tests	A. J. Permoda	Jun-62	Pavement Design & Pavement Performance
SPR-388	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
SPR-389	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
SPR-390	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
SPR-391	Evaluation of a Hinged Wire Mesh Reinforcement for Concrete Pavements	H. C. Brunke	Oct-62	Pavement Design & Pavement Performance
SPR-392	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
SPR-393	Aluminum Chain Link Fencing	C. C. Rhodes	Jun-62	Materials

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SPR-394	Houghton-Hancock Lift Bridge Deck Leakage (B01 of 31012)	M. G. Brown	Aug-62	Bridge & Special Structures Design
SPR-395	Summaries of Michigan Pavement Roughness 1961 Test Program	P. M. Schafer, L. F. Holbrook	Dec-62	Pavement Design & Pavement Performance
SPR-396R	Aggregate Source and Popout Frequency, I-94 from Stevensville to Marshall	O. L. Lindy, J. W. Sparbel	Feb-63	Materials
SPR-397	Failures of Continuously Reinforced Pavement, I-96, Portland Road to M-66	J. E. Simonsen	Dec-62	Pavement Design & Pavement Performance
SPR-398	Premolded Rubber and Polyvinyl Chloride Base Plates	E. A. Finney	Oct-62	Materials
SPR-399	1961 Performance Tests of White and Yellow Traffic Paints	A. J. Permoda, R. L. Snider, M. H. Janson	Nov-62	Materials
SPR-400	Preservative Treatments for Timber Piling, First Progress Report	B. W. Pockock	Nov-62	Materials
SPR-401	"Compriband" Preformed Urethane Joint Sealer	A. J. Permoda, D. F. Simmons	Nov-62	Pavement Design & Pavement Performance
SPR-402	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
SPR-403	Strength Comparison of Steel Sign Posts	H. C. Brunke	Dec-62	Materials
SPR-404	Laboratory and Field Study of Right-of-Way Fence Wire Splices	H. C. Brunke	Jan-63	Materials
SPR-405	Placement of Steel: I-75 North of St. Ignace (Project No. BI 49025E, C18)	C. J. Arnold	Dec-62	Pavement Design & Pavement Performance
SPR-406	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
SPR-407	Trenching for Expansion Joints	C. J. Arnold	Dec-62	Pavement Design & Pavement Performance
SPR-408R	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
SPR-409	Repair of Continuously Reinforced Pavement I-96 Portland Road to M-66	J. E. Simonsen	Jan-63	Pavement Design & Pavement Performance
SPR-410	1962 Observations on Condition of Experimental Poz-O-Pac Construction (Construction Projects BU 56044, C3UN and C4UN)	R. C. Mainfort	Jan-63	Construction
SPR-411	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
SPR-412	Development of a Rapid Field Method for Determining Optimum Moisture and Maximum Density of Soils	R. C. Mainfort, J. H. DeFoe	Feb-63	Environmental
SPR-413	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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SPR-414R	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
SPR-415R	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
SPR-416	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
SPR-417R	Form Insulation for Bridge Concrete	C. A. Zapata, G. A. Otto	Dec-63	Bridge & Special Structures Design
SPR-418	Skid Test Results at High-Accident Intersections: Districts 1 through 10, 1962 Test Program	M. G. Brown	Apr-63	Pavement Design & Pavement Performance
SPR-419	Corrosion of Painted Steel Right-of-Way Posts	B. W. Pocock, O. L. Lindy	Apr-63	Materials
SPR-420	Progress Report on 1962 Traffic Paint Performance Tests	A. J. Permoda	Apr-63	Materials
SPR-421	Profilometer Measurement of Bridge Roughness, First Progress Report	C. J. Arnold, C. D. Church	May-63	Bridge & Special Structures Design
SPR-422	Right-of-Way Fence Sagging Investigation	B. W. Pocock	May-63	Right of Way Permitting
SPR-423	Soil-Aggregate Cushions for Prevention of Reflection Cracking of Resurfaced Pavements, First Progress Report	F. Copple	May-63	Environmental
SPR-424	Repair of Continuously Reinforced Experimental Pavement: I-96 from Portland Road to M-66	J. E. Simonsen	May-63	Pavement Design & Pavement Performance
SPR-425	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
SPR-426	Insulation Between Steel and Aluminum for Extruded Traffic Sign Mountings	B. W. Pocock, C. A. Zapata	Jun-63	Materials
SPR-427R	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
SPR-428	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
SPR-429	Barrett Urethane Rigid Foam Joint Filler	A. J. Permoda	May-63	Pavement Design & Pavement Performance
SPR-430	Profilometer Measurement of Bridge Roughness, Second Progress Report	C. D. Church	Jun-63	Bridge & Special Structures Design
SPR-431	Summaries of Michigan Pavement Roughness, 1962 Test Program	P. M. Schafer	Oct-63	Pavement Design & Pavement Performance
SPR-432	Reflectorized Delineator Posts (Mid-States Steel and Wire Company)	M. H. Janson, P. J. Chamberlain	Oct-63	Systems, Maintenance & Operations
SPR-433	Rusting of Cadmium-Plated Bolt Assemblies on Bridge Railings	P. G. Gray	Sep-63	Bridge & Special Structures Design

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SPR-434	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
SPR-435	Evaluation of Preformed Rubber Sealer on M-46 West of Alma (Construction Project F29-23 C2)	A. J. Permoda	Sep-63	Materials
SPR-436	Hydraulic Oil for Use in the Houghton-Hancock Bridge	D. F. Simmons	Sep-63	Bridge & Special Structures Design
SPR-437	Permalastic "J-Seal PX-1424" Two-Component Joint Sealant	A. J. Permoda	Sep-63	Pavement Design & Pavement Performance
SPR-438	Preservative Treatments for Timber Piling, Second Progress Report	B. W. Pocock	Sep-63	Materials
SPR-439	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
SPR-440	Progress Report on Witcogard Rustproofer for Guard Rails	A. J. Permoda	Oct-63	Materials
SPR-441	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
SPR-442	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
SPR-443	Profilometer Measurement of Bridge Roughness, Third Progress Report	C. D. Church	Nov-63	Bridge & Special Structures Design
SPR-444	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
SPR-445	Polymer Plastic Marker Posts (Handley Industries, Inc.)	A. J. Permoda	Dec-63	Materials
SPR-446	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
SPR-447	Summary of Bituminous Concrete Skid Test Data Relative to Materials	M. G. Brown	Jan-64	Pavement Design & Pavement Performance
SPR-448	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
SPR-449	Progress Report on "Tedlar" DuPont Polyvinyl Fluoride Film, Pre-Finished Metals, Inc.	A. J. Permoda	Feb-64	Materials
SPR-450	Profilometer Measurement of Bridge Roughness, Fourth Progress Report	C. D. Church	Feb-64	Bridge & Special Structures Design
SPR-451	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
SPR-452	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
SPR-453	Fasson Reflective Sheeting (Fasson Products Co.)	M. H. Janson	Mar-64	Materials

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SPR-454	Decayed Dimension Guard Rail Posts near Farmington	W. L. Frederick	Mar-64	Materials
SPR-455	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
SPR-456	Failure of I-94 Joint Sealants: Mt. Clemens to Marysville	M. G. Brown, D. F. Simmons	Apr-64	Pavement Design & Pavement Performance
SPR-457	Progress Report on 1963 Traffic Paint Performance Tests	A. J. Permoda	Apr-64	Materials
SPR-458	Scaling of Concrete Bridge Decks Constructed with Stay-In Place Forms	R. H. Merrill, J. E. Simonsen	Apr-64	Bridge & Special Structures Design
SPR-459	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
SPR-460	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
SPR-461	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
SPR-462	Investigation of Snow Fence Post Breakage	J. T. Ellis, C. J. Arnold	Jun-64	Materials
SPR-463	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
SPR-464	Smoke and Corrosive Industrial Refuse Investigation: I-75 High Level Bridge over the Rouge River, Detroit (Construction Project B01 of 82194G)	M. H. Janson, W. L. Frederick, M. G. Brown, C. C. Rhodes	Jul-64	Environmental
SPR-465	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
SPR-466	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
SPR-467	Preservative Treatments for Timber Piling: Two-Year Inspection, Third Progress Report	B. W. Pocock, W. W. Miller	Aug-64	Materials
SPR-468	Contract Resealing of Transverse Joints: Sealing and Performance of 1963 Maintenance Projects	D. F. Simmons, J. E. Simonsen	Sep-64	Pavement Design & Pavement Performance
SPR-469	Profilometer Measurement of Bridge Roughness, Fifth Progress Report	C. D. Church	Sep-64	Bridge & Special Structures Design
SPR-470	Soil-Aggregate Cushions for Prevention of Reflection Cracking of Resurfaced Pavements, Second Progress Report	F. Copple	Sep-64	Environmental
SPR-471	Evaluation of Telespar Tubing for Use as Highway Sign Supports	J. E. Simonsen	Sep-64	Materials
SPR-472	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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SPR-473	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
SPR-474	Galvanized (Zinc Alloy) Steel Base Plates for Joints	O. L. Lindy	Sep-64	Pavement Design & Pavement Performance
SPR-475	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
SPR-476	Application and First Inspection of "Epoxeal" Penetrating Sealer on Lansing Area Bridge Decks	R. H. Merrill, F. J. Bashore	Sep-64	Bridge & Special Structures Design
SPR-477	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
SPR-478	Alleged Damage to Dwelling of A.T. Schmidt, Vassar, Michigan	C. J. Arnold	Oct-64	Environmental
SPR-479	Summary of Laboratory Evaluation of "Silexore" Protective Coatings for Concrete	M. G. Brown	Oct-64	Pavement Design & Pavement Performance
SPR-480	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
SPR-481	Thermoplastic Pavement Marking on W. P. Chrysler Freeway (Projects BI 82111C, C24; BI 82251C, C34)	A. J. Permoda	Nov-64	Pavement Design & Pavement Performance
SPR-482	Field Installation and Inspection of Polymer Plastic Marker Posts	F. J. Bashore	Oct-64	Materials
SPR-483	Paint Peeling Off Pressure-Treated Wood Posts	A. J. Permoda	Oct-64	Materials
SPR-484	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
SPR-485R	Evaluation of Hook Bolts for Longitudinal Bulkhead Construction Joints	J. E. Simonsen, P. Milliman	Jan-65	Pavement Design & Pavement Performance
SPR-486	Repair of Rubber Pad Railroad Crossing (NYC RR Crossing US-23 South of Dundee)	J. E. Simonsen	Jan-65	Multi-Modal
SPR-487	Construction and Sealing of Transverse Contraction Joints Containing Acme Load Transfer Assemblies	J. E. Simonsen	Dec-64	Pavement Design & Pavement Performance
SPR-488	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
SPR-489	Progress Report on Evaluation and Application Study of General Motors Corporation Rapid Travel Profilometer	L. T. Oehler, P. Milliman	Dec-64	Systems, Maintenance & Operations
SPR-490	Determination of Air Content in Hardened Concrete by Gamma-Ray Transmission	B. W. Pocock, W. W. Miller	Sep-67	Pavement Design & Pavement Performance
SPR-491	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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SPR-492	Profilometer Measurement of Bridge Roughness, Sixth Progress Report	C. D. Church	Feb-65	Bridge & Special Structures Design
SPR-493	Performance of Hot-Poured and Cold-Applied Joint Sealers	C. C. Rhodes, L. T. Oehler	Feb-65	Pavement Design & Pavement Performance
SPR-494	Further Development and Evaluation of The Michigan Nuclear Gage	R. C. Mainfort, J. H. DeFoe	Apr-65	Systems, Maintenance & Operations
SPR-495	Field Evaluation of the Ohmart Nuclear Weighing System	F. Copple	Mar-65	Systems, Maintenance & Operations
SPR-496R	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
SPR-497R	Studies of Corrosion Resistance of Dowel Bars	A. J. Permoda, O. L. Lindy	May-65	Materials
SPR-498	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
SPR-499	Anti-Glare Fence Specifications	B. W. Pockock	Feb-65	Transportation Safety
SPR-500	Operating Manual for the Michigan Nuclear Soil Density-Moisture Gage	J. H. DeFoe	Mar-65	Systems, Maintenance & Operations
SPR-501	Proprietary Surface Conversion Treatments for Aluminum	A. J. Permoda	Mar-65	Materials
SPR-502	Snap-In Reflector Buttons	L. T. Oehler	Mar-65	Materials
SPR-503	Blink-A-Lite "Caution" Sign	M. H. Janson	Mar-65	Materials
SPR-504	Effect on Bridges of Proposed Changes in Permissible Truck Loads	L. T. Oehler	Mar-65	Asset Management
SPR-505	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
SPR-506	Progress Report on 1964 Traffic Paint Performance Tests	A. J. Permoda	Apr-65	Materials
SPR-507	Test Rod Skidometer Data for the 1964 Test Year	P. M. Schafer	Apr-65	Pavement Design & Pavement Performance
SPR-508	Protective Coatings for Structural Steel, Third Progress Report	A. J. Permoda, R. L. Snider	Jul-65	Materials
SPR-509	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
SPR-510	Survey of Substructures on Edsel Ford Freeway	O. L. Lindy	May-65	Bridge & Special Structures Design
SPR-511	Rust Dissolver and Manganese-Phospholene No. 7	A. J. Permoda	Apr-65	Materials

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Report Number	Title	Author	Publication Date	Category
SPR-512	Laboratory Test Results on Safe-Ray Glass Beads (High Intensity) for Pavement Marking	A. J. Permoda	Apr-65	Materials
SPR-513	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
SPR-514	Plastic "Men Working" Sign	M. H. Janson	Apr-65	Materials
SPR-515	Plastic Signal Lenses	M. H. Janson	Apr-65	Materials
SPR-516	Inspection of Projects Containing Selected Big Cut Pit Aggregate	F. Copple	Apr-65	Materials
SPR-517	Dynamic Aspects of Vehicle Size and Weight	E. A. Finney	May-65	Commercial Vehicle Enforcement
SPR-518	Evaluation of "Ethaforam" Proposed Joint Sealer	M. G. Brown	May-65	Pavement Design & Pavement Performance
SPR-519	Evaluation of "Epoximent" Admixture for Mortar or Concrete	R. H. Merrill	May-65	Materials
SPR-520R	Survey of I-94 Bridge Crossing Clinton River Cutoff Canal (B01 of 50111)	F. Copple	Jun-65	Bridge & Special Structures Design
SPR-521	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
SPR-522	Structural Evaluation of Steel Snow Fence Posts	H. C. Brunke	Jun-65	Materials
SPR-523	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
SPR-524	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
SPR-525	Failures of Two-Component, Cold-Pour Joint Sealant in New Pavement Construction	F. J. Bashore	Jun-65	Pavement Design & Pavement Performance
SPR-526	Summaries of Michigan Pavement Roughness: 1963-64 Test Program	P. M. Schafer	Jun-65	Pavement Design & Pavement Performance
SPR-527R	Field Evaluation of Styrofoam as Insulation Against Frost Effects in Flexible Pavement Foundation Components	E. C. Novak, Jr., R. C. Mainfort	Oct-65	Materials
SPR-528	Met-Fiber Joint-Forming Material	L. T. Oehler	Jun-65	Pavement Design & Pavement Performance
SPR-529	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
SPR-530	Inspection of Neoprene Preformed Sealant Failures in Battle Creek Projects (I 13033D, C8 and U 13121E, C2, C3)	F. J. Bashore	Jul-65	Materials
SPR-531	Evaluation of "Rhap-Trol" Herbicide Spray System	M. H. Janson	Jun-65	Materials

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SPR-532	Progress Report on Test Applications of 3M's "Instant Set" Paint Striping	A. J. Permoda	Jul-65	Materials
SPR-533	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
SPR-534	"Adjus-To-Grade" Manhole Casting (National Utility Products Co.)	C. J. Arnold	Jun-65	Materials
SPR-535	Experimental Shoulder Stabilization on US-23 North of Alpena (MN 04032, C6)	R. C. Mainfort	Jul-65	Geotechnical & Foundaion Design
SPR-536	Joint Failures on Eastbound I-94, Parma to Jackson (Construction Project 38-48, C9)	J. E. Simonsen	Jul-65	Pavement Design & Pavement Performance
SPR-537	Mercury Vapor "Super Lumen" Lights (Jewel Electric Products Inc.)	M. H. Janson	Jul-65	Materials
SPR-538	Damping Bridge Vibration During Construction Widening	G. R. Cudney	Jul-65	Bridge & Special Structures Design
SPR-539	Pavement Evaluation of I-94 Control Sections 81041, 81002, and 81005 - Detroit Industrial Expressway from Carpenter Road to Rawsonville Road (Washtenaw-Wayne County Line)	F. Copple	Jun-65	Pavement Design & Pavement Performance
SPR-540	Aluminum Delineator Posts (Reynolds Metals Co.)	H. C. Brunke	Aug-65	Systems, Maintenance & Operations
SPR-541	US-127 Blowup South of Jackson (Construction Project 38-7, C5)	J. E. Simonsen	Sep-65	Pavement Design & Pavement Performance
SPR-542	Profilometer Measurement of Bridge Roughness, Seventh Progress Report	C. D. Church	Nov-65	Bridge & Special Structures Design
SPR-543	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
SPR-544	Depth of Nuclear Gage Influence in Subbase Testing	R. C. Mainfort	Aug-65	Systems, Maintenance & Operations
SPR-545	Joint Blowup, I-94 East of US-127 Bypass, Jackson County	F. Copple	Sep-65	Pavement Design & Pavement Performance
SPR-546	Testing of "Coherex" Emulsified Oil	R. C. Mainfort	Sep-65	Materials
SPR-547	Preservative Treatments for Timber Piling: Three Year Inspection, Fourth Progress Report	B. W. Pocock, W. W. Miller	Sep-65	Materials
SPR-548	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
SPR-549	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>
SPR-551	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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SPR-552	Testing of "Chempact" and "Road Packer"	R. C. Mainfort, J. T. Ellis	Oct-65	Materials
SPR-553	SS-22 Soil Stabilizer	R. C. Mainfort	Oct-65	Environmental
SPR-554	Pavement Characteristics at Scales—1965 Truck Weight Study	F. Copple	Oct-65	Commercial Vehicle Enforcement
SPR-555R	Inspection of Pavement Joints on US-127, Hillsdale County	F. Copple	Mar-66	Pavement Design & Pavement Performance
SPR-556	"Niteliner" Striping Application on Edsel Ford Freeway (I-94)	A. J. Permoda	Oct-65	Materials
SPR-557	Grade Separation Carrying Eight Mile Rd over the Couzens Expressway (I-696)	A. J. Permoda, W. L. Frederick	Oct-65	Pavement Design & Pavement Performance
SPR-558	Investigation of Limestone Coarse Aggregate from the Waterville, Ohio, Quarry of the France Stone Company	C. D. Church, G. R. Cudney	Nov-65	Materials
SPR-559	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
SPR-560	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
SPR-561R	Prestressed Concrete Beam Construction Practice	C. J. Arnold	Mar-66	Pavement Design & Pavement Performance
SPR-562R	Machine Finishing of I-96 Bridges over the Grand River (B01 and B02 of 2315A)	H. C. Brunke	Dec-65	Bridge & Special Structures Design
SPR-563	Performance of Joint Sealants Used in 1964-65 Michigan Construction	J. E. Simonsen, F. J. Bashore	Dec-65	Pavement Design & Pavement Performance
SPR-564	Second Annual Inspection of Bridge Decks Sealed with "EpoXeal" and "Concrete Sealer"	R. H. Merrill	Dec-65	Bridge & Special Structures Design
SPR-565	Comparison of Fiber Board and Plywood for Use in Roadside Sign Panels	J. E. Simonsen	Feb-66	Materials
SPR-566R	Slab Faulting Measurements at Blowup Repairs on I-94 near Jackson	E. A. Finney	Feb-66	Pavement Design & Pavement Performance
SPR-567	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
SPR-568	Development of a Neutron Gage for Determination of Mixing Efficiency of Central Mix Concrete Plants	P. Milliman	Dec-66	Systems, Maintenance & Operations
SPR-569	Corrosion Performance of Aluminum Culverts, First Progress Report	J. T. Ellis, J. E. Simonsen	Mar-66	Geotechnical & Foundation Design
SPR-570	Summaries of Michigan Pavement Roughness: 1965 Test Program	P. T. Luce	Jun-66	Pavement Design & Pavement Performance
SPR-571R	Evaluation of Stamp Sand as a Substitute for sand Subbase	R. C. Mainfort, E. C. Novak, Jr.	Jun-66	Materials

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SPR-572	Highway Quality Control Program: Statistical Parameters	L. T. Oehler, C. A. Zapata	Jun-66	Planning
SPR-573	Accident Damage to Aluminum and Steel Guard Rails	J. E. Simonsen	Mar-66	Materials
SPR-574	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
SPR-575	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
SPR-576	Final Report on Test Applications of 3M's "Instant Set" Paint Striping	A. J. Permoda	Apr-66	Materials
SPR-577	First Progress Report on 1965 Traffic Paint Performance Tests	A. J. Permoda	Apr-66	Materials
SPR-578	Evaluation of a Rubber Pad Railroad Crossing	J. E. Simonsen	Apr-66	Multi-Modal
SPR-579	Epoxy and Cement-Type Compounds for Grouting	C. J. Arnold, M. G. Brown	Apr-66	Materials
SPR-580	Review of the Department's Experience with Vinyl Type Coatings for Bridge Structural Steel	A. J. Permoda	Apr-66	Bridge & Special Structures Design
SPR-581	Sign Brightness in Relation to Legibility	T. M. Allen, G. M. Smith, M. H. Janson, F. N. Dyer	Aug-66	Transportation Safety
SPR-582	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>
SPR-584	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
SPR-585	Summaries of Michigan Pavement Skid Resistance: 1965 Test Program	P. M. Schafer	Jun-66	Pavement Design & Pavement Performance
SPR-586	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
SPR-587	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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SPR-591	Corrosion-Resistant Dowel Bars	E. A. Finney, A. J. Permoda	Aug-66	Materials
SPR-592	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
SPR-593	Photometric Test for Reflective Materials	M. H. Janson, G. M. Smith	Jul-66	Materials
SPR-594	Presstite Tape for Protection of New Joints Before Sealing	F. Copple	Aug-66	Pavement Design & Pavement Performance
SPR-595	"Fiberglas" Reinforced Plastic Rods	G. R. Cudney	Aug-66	Materials
SPR-596R	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>
SPR-598	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
SPR-599R	Soil-Aggregate Cushions for Prevention of Reflection Cracking of Resurfaced Pavements, Third Progress Report	F. Copple	Oct-66	Environmental
SPR-600	Evaluation of the Speedy Moisture Tester	E. C. Novak, Jr., L. D. Searcy	Oct-66	Materials
SPR-601	Break-Away-Sign Supports	C. J. Arnold	Sep-66	Transportation Safety
SPR-602	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>
SPR-604	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
SPR-605	"Surface Modified 1M" Metal coatings (Dow Chemical Company)	A. J. Permoda	Sep-66	Materials
SPR-606	"Fiberglas" Reinforced Plastic Rods	J. E. Simonsen	Sep-66	Materials
SPR-607	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
SPR-608	Deck Rippling on Various Michigan Bridges, Third Progress Report	C. J. Arnold	Oct-66	Bridge & Special Structures Design
SPR-609	Procedure for Design of Continuously Reinforced Concrete Pavements	F. Copple	Oct-66	Pavement Design & Pavement Performance
SPR-610	Impact Tests of Breakaway Light Poles	J. E. Simonsen, F. DeRose	Oct-66	Transportation Safety

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SPR-611	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
SPR-612	Michigan's Experience with Nuclear Gages for Measuring Soil Compaction	R. C. Mainfort	Nov-66	Systems, Maintenance & Operations
SPR-613	Flashing Arrow-Bar Traffic Control Signs: A Report of Comparison Testing	F. Copple, P. Milliman	Nov-66	Systems, Maintenance & Operations
SPR-614	Testing of Waste Lime from Bay City	R. C. Mainfort	Nov-66	Materials
SPR-615	Michigan's System for Weighing, Dimensioning, and Classifying Vehicles in Motion	P. Milliman	Nov-66	Commercial Vehicle Enforcement
SPR-616	Artesian Flow of Sulfide Water: I-75 over US-25 (I 82191J, C25)	M. G. Brown	Dec-66	Environmental
SPR-617	"Parlon" Based Curing and Sealing Compound, First Progress Report	H. L. Patterson	Dec-66	Materials
SPR-618	Field Test Applications of "Speed Crete" Patching Mixtures	M. G. Brown	Dec-66	Materials
SPR-619	Field Tests of Epoxy Grout and Expansion Anchors: Supplement to Research Report No. SPR-579	C. J. Arnold, M. G. Brown	Jan-67	Materials
SPR-620	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
SPR-621	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
SPR-622	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
SPR-623	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
SPR-624	Stabilization of Granular Base Materials with Rock Salt	R. L. Greenman, R. C. Mainfort	Mar-67	Materials
SPR-625	Performance of Joint Sealants Used in 1964, 1965, and 1966 Michigan Construction	F. J. Bashore	Mar-67	Pavement Design & Pavement Performance
SPR-626	"Confilm" Spray-On Film for Control of Evaporation From Fresh Concrete	E. A. Finney	Apr-67	Materials
SPR-627	Failure of Center-Mount Delineators: A Summary of Research Laboratory Observations	M. H. Janson	May-67	Systems, Maintenance & Operations
SPR-628	First Progress Report on 1966 Traffic Paint Performance Tests	A. J. Permoda	Mar-67	Materials
SPR-629	Driving Performance of Aluminum Delineator Posts	E. A. Finney	Mar-67	Systems, Maintenance & Operations
SPR-630	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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SPR-631	Summaries of Michigan Pavement Skid Resistance: 1966 Test Program	P. M. Schafer	Apr-67	Pavement Design & Pavement Performance
SPR-632	Summaries of Michigan Pavement Roughness: 1966 Test Program	P. T. Luce	Apr-67	Pavement Design & Pavement Performance
SPR-633	Method of Test and Equipment for Measurement of Pavement Skid Resistance	N/A	Apr-67	Pavement Design & Pavement Performance
SPR-634	Final Report on Michigan Experimental Transverse Joint Project	J. E. Simonsen	Sep-67	Pavement Design & Pavement Performance
SPR-635	Demonstration of Schmidt Post Driver	L. T. Oehler	Apr-67	Construction
SPR-636	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
SPR-637	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
SPR-638	The Effects of Loadings on Bridge Life	G. R. Cudney	Jan-68	Bridge & Special Structures Design
SPR-639	Mercury Vapor "Super Lumen" Lights (Jewel Electric Products Inc.)	M. H. Janson	Jun-67	Materials
SPR-640	Static Field Tests of Kwik-Bolt and Phillips Stud-Type Concrete Anchors	C. J. Arnold	Jun-67	Materials
SPR-641	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
SPR-642	Effect of De-Icing Chemicals on Air-Entrained Concrete at Early Ages	P. T. Luce	Jul-67	Pavement Design & Pavement Performance
SPR-643	Damaged Impellers for Storm Water Pumps	C. J. Arnold	Jul-67	Systems, Maintenance & Operations
SPR-644	Report on Witcogard Rustproofer for Guard Rails	L. T. Oehler	Jul-67	Materials
SPR-645	Fast Drying Traffic Paints	L. T. Oehler	Aug-67	Materials
SPR-646	Inspection Report of Field Applications of "Speed Crete" Patching Mixtures	M. G. Brown	Aug-67	Pavement Design & Pavement Performance
SPR-647	Field Evaluation of Six-Volt and Twelve-Volt Flashers	G. M. Smith, M. H. Janson	Aug-67	Construction
SPR-648	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
SPR-649	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
SPR-650	Research Laboratory Division Operations	L. T. Oehler	Jul-67	Administration & Management

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SPR-651	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
SPR-652	Investigation of Rigid Fuse Plates for Use on Breakaway Signs: Progress Report	E. L. Marvin	Nov-67	Transportation Safety
SPR-653	Progress Report on "Terbec C-7" Soil Stabilizer	R. C. Mainfort	Sep-67	Environmental
SPR-654	Extrusion of Neoprene Seals from Expansion Joints in Concrete Pavement	F. J. Bashore	Sep-67	Pavement Design & Pavement Performance
SPR-655	U.S. Rubber "Uniroyal" Advertising Sign, I-94, Detroit	G. M. Smith	Oct-67	Right-of-Way Permitting
SPR-655A	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
SPR-656	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
SPR-657R	Investigation of Concrete Pavement Cores from the Northbound I-75 Freeway	H. L. Patterson	Dec-67	Pavement Design & Pavement Performance
SPR-658	Development of a One-Point Cone Test for Determining Maximum Density of Granular Materials	R. C. Mainfort	Dec-67	Materials
SPR-659	The Effect of Shearing Deformations on Pull-Out Resistance of Steel Dowels Embedded in Concrete	E. L. Marvin	Dec-67	Materials
SPR-660	Comments on the Systems and Procedures Section Report Concerning Combining the Testing Laboratory and the Research Laboratory	L. T. Oehler	Dec-67	Administration & Management
SPR-661	Seventh Progress Report on Special Test Painting on M-78 Bridge Structural Steel	L. T. Oehler	Dec-67	Bridge & Special Structures Design
SPR-662	"Parlon" Based Curing and Sealing Compounds, Second Progress Report	H. L. Patterson	Mar-68	Materials
SPR-663	Evaluation of "Penepime" as a Stabilizing Agent for Aggregate Shoulders	R. C. Mainfort, J. H. DeFoe	Jan-68	Materials
SPR-664	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
SPR-665	3M High-Intensity Reflective Sheeting Delineator Failure	L. T. Oehler	Feb-68	Systems, Maintenance & Operations
SPR-666	Application of Instrumental Methods for Evaluating Highway Materials – Third Progress Report: Pyrolysis Gas Chromatography	J. T. Ellis, W. L. Frederick	Aug-68	Materials
SPR-667	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
SPR-668	Procedures for Repairing Continuously Reinforced Concrete Pavements	J. E. Simonsen	Mar-68	Pavement Design & Pavement Performance
SPR-669	Final Progress Report on Polymer Plastic Marker Posts	F. J. Bashore	Dec-67	Materials

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

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

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SPR-709	Evaluation of Styrofoam as Insulation Against Frost Action in a Flexible Pavement Foundation	E. C. Novak, Jr., R. C. Mainfort	Aug-69	Materials
SPR-710	Evaluation of Lane Tie Bolts for Slip-Form Paving	L. T. Oehler	Jul-69	Materials
SPR-711	Performance of Michigan's Postwar Concrete Pavement	L. T. Oehler, L. F. Holbrook	Jun-69	Pavement Design & Pavement Performance
SPR-712	Polyethylene Center Strip	J. E. Simonsen	Jul-69	Materials
SPR-713	"Alert Reflective Liquid" (Cataphote Corp.)	A. R. Gabel	Aug-69	Materials
SPR-714	Research Laboratory Operations	L. T. Oehler	Jan-69	Administration & Management
SPR-715	Evaluation of Five Commercial Fast-Setting Hydraulic Patching Mortars	H. L. Patterson	Oct-69	Materials
SPR-716	Protection of Substructure Concrete from A588 Steel Staining by Use of an Aluminum-Pigmented Coating	L. T. Oehler	Aug-69	Pavement Design & Pavement Performance
SPR-717	Corrosion-Resistant Guardrail	L. T. Oehler	Sep-69	Materials
SPR-718	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
SPR-719	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
SPR-720	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
SPR-721	Summary of Highway Department Concern in Connection with the Use of Tire Studs	L. T. Oehler	Dec-69	Pavement Design & Pavement Performance
SPR-722	Aluminum-Coated (Hot Dipped) Bolts for Bridge Railing Posts	A. J. Permoda	Nov-69	Bridge & Special Structures Design
SPR-723	Determination of Cement Content of Hardened Slag Concrete	W. J. Fredrick, J. T. Ellis, V. J. Troms, R. J. Matel	Jul-70	Pavement Design & Pavement Performance
SPR-724	Propane Warning Lights	M. H. Janson	Dec-69	Systems, Maintenance & Operations
SPR-725	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
SPR-726	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>
SPR-728	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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SPR-729	Urethane Foam Insulation of Bridge Concrete	C. A. Zapata, F. J. Bashore, W. E. Casey	Feb-70	Bridge & Special Structures Design
SPR-730	Use of Silicone Admixture in Bridge Deck Concrete	H. L. Patterson	Apr-70	Bridge & Special Structures Design
SPR-731	Evaluation and Application Study of the General Motors Corporation Rapid Travel Profilometer	J. R. Darlington	Oct-70	Bridge & Special Structures Design
SPR-732	Spun-Concrete Light Poles, I-96 and I-296 Kent County	F. Copple	Mar-70	Systems, Maintenance & Operations
SPR-733	Studded Tire Survey, Winter 1970	F. Copple	Mar-70	Pavement Design & Pavement Performance
SPR-734	Evaluation of Paczyme as a Soil Stabilizing Agent	R. C. Mainfort	Apr-70	Environmental
SPR-735	Development of Nuclear Methods for Quality Control of Highway Embankment Construction	R. C. Mainfort	Sep-70	Systems, Maintenance & Operations
SPR-736	"Liquid Green Lite" 3M's Instant Setting Traffic Paint	L. T. Oehler	Apr-70	Materials
SPR-737	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
SPR-738	Summaries of Michigan Pavement Roughness, 1969 Test Program	Michigan State Highway Commission	May-70	Pavement Design & Pavement Performance
SPR-739	Evaluation of Open Hearth Slag as a Highway Base Material	J. T. Defoe	May-70	Materials
SPR-740	ASTM A588 Steel in M-102 Structure over I-696 in Detroit	L. T. Oehler	May-70	Bridge & Special Structures Design
SPR-741	An Evaluation of "Effective and Dependable" Reflectorization for Registration Plates	Michigan State Highway Commission	May-70	Transportation Safety
SPR-742	"Bisymmetric Glass Beads" for Pavement Marking from the 3M Company	A. J. Permoda	May-70	Materials
SPR-743	Pavement Joint Spacing in Portland Cement Concrete Pavements	L. T. Oehler	Jun-70	Pavement Design & Pavement Performance
SPR-744	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
SPR-745	Evaluation of Nuclear Method for Asphalt Testing	J. H. DeFoe, A. P. Chritz	Jul-70	Systems, Maintenance & Operations
SPR-746	Evaluation of Aggregate Sources of Glacial Origin	N. E. Wingard	May-71	Materials
SPR-747	Michigan Department of State Highways Equipment for Measuring Pavement Skid Resistance	Michigan State Highway Commission	Feb-71	Pavement Design & Pavement Performance
SPR-748	Summaries of Michigan Pavement Skid Resistance, 1969 Test Program	Michigan State Highway Commission	Aug-70	Pavement Design & Pavement Performance

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SPR-749	Evaluation of a Quasi-Elastic Modulus of Granular Base Material	I. AlNouri	Sep-70	Materials
SPR-750	Michigan's Experience with Neoprene Compression Seal	L. T. Oehler, F. J. Bashore	Sep-70	Materials
SPR-751	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
SPR-752	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
SPR-753R	The Effect of Fines (P-200) on Bituminous Base Mixtures	I. Al Nouri	Feb-71	Materials
SPR-754	Evaluation of Hardy Salt for Ice Control Purposes	R. C. Mainfort	Nov-70	Materials
SPR-755	Proposed Highway Testing Laboratory and Research Laboratory	Michigan State Highway Commission	Nov-70	Administration & Management
SPR-756	Textured Concrete Pavement Surfaces	F. Copple	Nov-70	Pavement Design & Pavement Performance
SPR-757	Plastic Beads for Traffic Paint from Dow Chemical Company	A. J. Permoda	Nov-70	Materials
SPR-758	Theoretical Analysis of a Flexible Pavement Model	E. L. Marvin	Aug-71	Planning
SPR-759	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
SPR-760	1970 Performance Tests of "Fast-Dry" White Traffic Paints plus Comparative Paints	A. J. Permoda	Feb-71	Materials
SPR-761	Summaries of Michigan Pavement Roughness, 1970 Test Program	Michigan State Highway Commission	Jan-71	Pavement Design & Pavement Performance
SPR-762	Progress Report, Concrete Pavement Joint Repair with Pre-Cast Slabs	J. E. Simonsen	Apr-71	Pavement Design & Pavement Performance
SPR-763	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
SPR-764	Low Density Polyethylene Foam for Pressure Relief Joints	F. J. Bashore	Jan-71	Pavement Design & Pavement Performance
SPR-765	Design Recommendation for Continuous Reinforced Pavements in Michigan	L. T. Oehler	Mar-71	Pavement Design & Pavement Performance
SPR-766	Second Annual Studded Tire Survey, Winter 1970-71	F. Copple	Apr-71	Pavement Design & Pavement Performance
SPR-767	Strain and Deflection Measurements on an Experimental Orthotropic Bridge	C. J. Arnold	May-71	Bridge & Special Structures Design
SPR-768	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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SPR-769	Further Evaluation of Open Hearth Slag as a Highway Base Material	R. C. Mainfort, J. H. DeFoe	Jul-71	Materials
SPR-770	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
SPR-771	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
SPR-772	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
SPR-773	Alleged damage to the Residence of S. D. Fralick Due to Traffic Induced Vibrations	C. J. Arnold, I. Al Nouri	Jul-71	Environmental
SPR-774	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
SPR-775	A Survey of Vehicles Using Studded, Smooth, or Snow Tires in Michigan	F. Copple	Jul-71	Pavement Design & Pavement Performance
SPR-776	Summaries of Michigan Pavement Skid Resistance, 1970 Test Program	Michigan State Highway Commission	Aug-71	Pavement Design & Pavement Performance
SPR-777	Pull-Out Testing of McCormick Precoated Dowel Bars	C. J. Arnold	Aug-71	Materials
SPR-778	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
SPR-779	Highway Quality Control Program	C. D. Church, F. Copple, C. A. Zapata	Aug-71	Planning
SPR-780	Experimental Shoring to Reduce Vibration During Bridge Deck Widening	C. J. Arnold	Aug-71	Bridge & Special Structures Design
SPR-781	Permeability Characteristics of Various Subbase Materials	E. C. Novak	Aug-71	Materials
SPR-782	Pull-Out Tests of Adiprene-Coated Dowel Bars	C. J. Arnold	Aug-71	Materials
SPR-783	Determination and Improvement of Relevant Pavement Skid Coefficients	F. Copple	Aug-71	Pavement Design & Pavement Performance
SPR-784	Ambient Air Quality Analyses for the Proposed I-696 Corridor	W. L. Frederick, J. T. Ellis	Aug-71	Environmental
SPR-785	Photometric Test for Reflex Reflective Materials	M. H. Janson,	May-72	Materials
SPR-786	Traffic Noise Factors Related to the Proposed MSU Cross Campus Route	G. M. Smith	Sep-71	Environmental
SPR-787	Air Quality Analyses for the Proposed MSU Cross Campus M-43	P. Milliman, L. E. DeFrain	Sep-71	Environmental
SPR-788	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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SPR-789	Survey of Pavement Joint Conditions	J. E. Simonsen	Oct-71	Pavement Design & Pavement Performance
SPR-790R	Recommendations Concerning Concrete Pavement Design and Maintenance	Michigan State Highway Commission	Nov-71	Pavement Design & Pavement Performance
SPR-791	Studded Tires: Their Effect on Highways and Vehicle Safety in Michigan	F. Copple	Nov-71	Asset Management
SPR-792	Performance Evaluation of Mixed-in-Place Bituminous Stabilized Shoulder Gravel	F. Copple, A. P. Chritz	Nov-71	Materials
SPR-793	Noise Impact on Community Building and Pleasant Ridge Recreation Area Due to Proposed I-696 Extension	M. N. Clyde	Nov-71	Environmental
SPR-794	Installation of Traffic Loop Detectors	M. N. Clyde	Nov-71	Materials
SPR-795	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
SPR-796	Study of Delayed Set in Bridge Deck Pour (S05 of 63103)	M. G. Brown	Dec-71	Bridge & Special Structures Design
SPR-797	Experimental Vehicle Traffic Control Signals: A Final Report	M. N. Clyde	Dec-71	Systems, Maintenance & Operations
SPR-798	1971 Performance Tests of "Fast-Dry" White Pavement Marking Paints	A. J. Permoda	Dec-71	Materials
SPR-799	Evaluation of "Poxicon" Fly Ash Concrete Admixture, Interim Report	H. L. Patterson	Dec-71	Materials
SPR-800	Environmental Geologic Study of the Proposed US-127 Alternate Routes	R. W. Noyce, T. A. Herbert	Jan-72	Environmental
SPR-801	Pull-Out Tests of Scotchkote-Coated Dowel Bars	J. D. Culp	Feb-72	Materials
SPR-802	Developing Composition Specifications for Traffic Paints: Regular-Dry Type	A. J. Permoda, A. R. Gabel	Feb-72	Materials
SPR-803	"Elastizell" as an Insulator for Highway Bases	R. C. Mainfort	Feb-72	Materials
SPR-804	Construction Report on Concrete Pavement Joint Repair with Pre-Cast Slabs	J. E. Simonsen	Feb-72	Pavement Design & Pavement Performance
SPR-805	A Method of Determining Subbase Drainability	E. C. Novak, Jr.	Apr-72	Materials
SPR-806	Environmental Geologic Study of the Proposed US-131 Corridor	F. J. Chenier	Mar-72	Environmental
SPR-807	Expansion Anchors for Use as Lane Ties	M. A. Chiunti	Mar-72	Materials
SPR-808	Snow Plow Damage of "Transflex" Bridge Seals	L. T. Oehler	Mar-72	Bridge & Special Structures Design

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SPR-809	Skid Testing of Seal Coats	L. T. Oehler	Mar-72	Pavement Design & Pavement Performance
SPR-810	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>
SPR-812	Evaluation of Manhole Step (Giant Step No. 170), Construction Products Corp.	L. T. Oehler	Apr-72	Materials
SPR-813	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
SPR-814	Statewide Determination of Highway Loadings and Conversion to 18-Kip Single Axle Load Equivalence	F. Copple	Mar-73	Commerical Vehicle Enforcement
SPR-815	Hydroplaning on Highways	F. Copple	May-72	Pavement Design & Pavement Performance
SPR-816	Effect of Temperature on the Elastic Response of Asphalt Treated Base Materials	I. Al Nouri	Jun-72	Materials
SPR-817	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
SPR-818	Cycolac Plastic for Non-Reflectorized Signs	J. T. Ellis	Mar-73	Materials
SPR-819	Kralastic Plastic for Non-Reflectorized Signs	J. T. Ellis	Mar-73	Materials
SPR-820	The Environmental Geology of Proposed I-69	G. R. Foster	Jul-72	Environmental
SPR-821	Development of Louvered Signs to Reduce Wind Load	Michigan State Highway Commission	Jan-73	Bridge & Special Structures Design
SPR-822	Demonstration of Vermeer Saw (I-75 Genesee County)	L. T. Oehler	Jun-72	Materials
SPR-823	Federal and State Air Quality Environmental Protection Requirements and Some Alternative Plans to Meet Them	M. H. Janson, W. L. Frederick	Jul-72	Environmental
SPR-824	Corrugated Metal Pipe Culvert Disintegration, I-75 Mackinac County	J. T. Ellis	Jul-72	Geotechnical & Foundation Design
SPR-825	Expansion Anchors for Lane Ties	C. J. Arnold	Jul-72	Materials
SPR-826	Investigation of Traffic-Induced Vibration at McDade Inc., Real Estate Office in Dearborn	C. J. Arnold	Aug-72	Environmental
SPR-827	Investigation of Low and Erratic Concrete Pavement Core Compressive Strength	H. L. Patterson, M. G. Brown	Feb-73	Pavement Design & Pavement Performance
SPR-828	Pollution of Michigan Urban Atmospheres by Highway Generated Noise	Michigan State Highway Commission	Sep-72	Environmental

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

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SPR-849	Air Quality Section for the Final Environmental Impact Statement for Proposed I-475	Michigan State Highway Commission	Feb-73	Environmental
SPR-850	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
SPR-851	Further Noise Predictions for I-696 EIS-II	L. T. Oehler	Mar-73	Environmental
SPR-852	Experimental Steel-Fiber-Reinforced Concrete Overlay	C. J. Arnold, M. G. Brown	Apr-73	Pavement Design & Pavement Performance
SPR-853R	Simplified Technique for Traffic Noise Level Estimation	G. H. Grove	Apr-73	Environmental
SPR-854	Water Quality Investigation on Griffin Lake at the Interchange of M-78 and M-15	M. N. Clyde	Mar-73	Environmental
SPR-855	Random Observations on Performance of Highway Striping in Lansing During 1972-73 Winter	L. T. Oehler	Mar-73	Pavement Design & Pavement Performance
SPR-856	PSI Values for I-94 from Telegraph to Wyoming	M. N. Clyde	Apr-73	Pavement Design & Pavement Performance
SPR-857	Bulkhead Joints for Concrete Base Shoulders	M. A. Chiunti	Apr-73	Geotechnical & Foundataion Design
SPR-858	Dynamic Load Aspects of Truck Size and Weight	J. R. Darlington	Aug-73	Commercial Vehicle Enforcement
SPR-859	Preventive Maintenance of Concrete Pavements	J. E. Simonsen	Jun-73	Pavement Design & Pavement Performance
SPR-860	1974 National Transportation Study	M. N. Clyde	Apr-73	Planning
SPR-861	An Evaluation of Mastic-Type Paving Mixtures for Resurfacing a Roadway and a Bridge Deck	F. Copple	Jun-73	Bridge & Special Structures Design
SPR-862	Air Quality Section for the Final Environmental Impact Statement for Proposed I-475	Michigan State Highway Commission	Jun-73	Environmental
SPR-863	Summary of Roadway Luminaire Test Results (1971-72)	G. M. Smith	Jun-73	Systems, Maintenance & Operations
SPR-864	Rest Area Simulation Model	L. E. DeFrain	Jun-73	Tourism
SPR-865	M-99 Logan Street, City of Lansing, Noise Study	M. N. Clyde	Jun-73	Environmental
SPR-866	Failure of Preformed Guy-Grip Dead-Ends Used for Suspending Steel Cable from Poles	M. N. Clyde	Jun-73	Bridge & Special Structures Design
SPR-867	Pull-Out Test Results of Hilti Fastening Systems	M. A. Chiunti	Jun-73	Materials
SPR-868	"Resil-a-Post" Flexible Traffic Guide Post	F. J. Bashore	Jul-73	Materials

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Report Number	Title	Author	Publication Date	Category
SPR-869	Joint Failures on I-75 North of Flint	L. T. Oehler	Jul-73	Pavement Design & Pavement Performance
SPR-870	Evaluation of Liquid Chemicals for Preventing Ice Formation on Highway Bridge Decks	J. H. DeFoe	Jul-73	Bridge & Special Structures Design
SPR-871	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
SPR-872	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
SPR-873	Reflectorization of Fluorescent Flagman Vests	M. H. Janson, G. M. Smith	Jul-73	Systems, Operations & Maintenance
SPR-874	Noise Study for the Final Environmental Impact Statement for Proposed I-475	Michigan State Highway Commission	Jul-73	Environmental
SPR-875	Bridge Deck Construction	C. J. Arnold	Aug-73	Bridge & Special Structures Design
SPR-876	Movement Study of Bridge Piers	C. J. Arnold, M. A. Chiunti	Aug-73	Bridge & Special Structures Design
SPR-877	"Quaker-Klat" Black Bituminous Coating (Quaker State Oil Co.)	A. J. Permoda	Aug-73	Materials
SPR-878	Steel-Fiber-Reinforced Concrete Overlay	C. J. Arnold	Aug-73	Pavement Design & Pavement Performance
SPR-879	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
SPR-880	Air Quality Section for the Final Environmental Impact Statement for Proposed M-99	Michigan State Highway Commission	Aug-73	Environmental
SPR-881	Corrosion Resistance of Dowel Bats (Organic Coatings)	A. R. Gabel, A. J. Permoda	Aug-73	Materials
SPR-882	Air Quality Section for the Final Environmental Impact Statement for Proposed Northwestern Highway	Michigan State Highway Commission	Aug-73	Environmental
SPR-883	Summaries of Michigan Pavement Skid Resistance, 1972 Test Program	Michigan State Highway Commission	Sep-73	Pavement Design & Pavement Performance
SPR-884	Feasibility of Hearth Slag for Bases	J. H. DeFoe	Sep-73	Materials
SPR-885	A Hot-Mix Asphalt Compaction Demonstration Experiment Comparing Vibratory and Conventional Rollers	C. A. Zapata	Oct-73	Pavement Design & Pavement Performance
SPR-886	Air Quality Section for the Draft Environmental Impact Statement for Proposed I-96	Michigan State Highway Commission	Oct-73	Environmental
SPR-887	Annual Studded Tire Survey, Winter 1972-1973	R. L. Felter, P. M. Schafer	Oct-73	Pavement Design & Pavement Performance
SPR-888	Current Research Laboratory Program	L. T. Oehler	Oct-73	Administration & Management

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Report Number	Title	Author	Publication Date	Category
SPR-889	Investigation of Narrow Width Reinforcing Mats and Longer Slabs with Slip-Form Paving	J. E. Simonsen	Oct-73	Pavement Design & Pavement Performance
SPR-890	Traffic Noise Level Predictor Computer Program	G. H. Grove	Oct-73	Systems, Maintenance & Operations
SPR-891	Aluminum-Coated Chain Link Fence	F. J. Bashore	Oct-73	Materials
SPR-892	Automatic Weighting of Vehicles in Motion and Collection of Traffic Data by Electronic Methods	Michigan State Highway Commission	Mar-74	Commercial Vehicle Enforcement
SPR-893	Drainability Analysis of Samples Submitted to the Porous Materials Specification Committee by District Soils Engineers	E. C. Novak, Jr.	Dec-73	Environmental
SPR-894	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
SPR-895	Faulting of Short Slab Concrete Pavements	C. J. Arnold	Dec-73	Pavement Design & Pavement Performance
SPR-896	Investigation of Structural Tees, Galvanized in Sections in a Truss-Type Pedestrian Bridge	A. J. Permoda	Jan-74	Bridge & Special Structures Design
SPR-897	Legibility Distance of I-69 Reflector Button Legend Signs	G. M. Smith	Jan-74	Transportation Safety
SPR-898	Experimental Concrete and Bituminous Shoulders (Progress Report)	M. A. Chiunti	Feb-74	Geotechnical & Foundataion Design
SPR-899R	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
SPR-900	1973 Performance Tests of “Fast-Dry” White and Yellow Pavement Marking Paints	A. J. Permoda	Feb-74	Materials
SPR-901	Final Report on Evaluation of a Rubber Pad Railroad Crossing	J. E. Simonsen	Feb-74	Multi-Modal
SPR-902	Air Quality Report for I-75 Zilwaukee Bridge	Michigan State Highway Commission	Feb-74	Environmental
SPR-903	Study of Glare Due to Parking Lot Lighting on US-127 near M-36, Mason	L. T. Oehler	Feb-74	Transportation Safety
SPR-904	Dow Two-Component Self Leveling Urethane Joint Sealant	F. J. Bashore, A. W. Price	Feb-74	Pavement Design & Pavement Performance
SPR-905	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
SPR-906	Air Quality Report for US-24 (Telegraph Rd.), Oakland County	Michigan State Highway Commission	Mar-74	Environmental
SPR-907	Survey and Recommendations Concerning Aluminum Anchor Bolts on Bridge Rails	C. J. Arnold, M. A. Chiunti	Mar-74	Bridge & Special Structures Design
SPR-908	Bulkhead Joints for Concrete Base Shoulders (Progress Report)	C. J. Arnold, M. A. Chiunti	Mar-74	Geotechnical & Foundataion Design

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

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SPR-929	Air Quality Report for Proposed I-69 from I-96 to US-27	Michigan State Highway Commission	Jul-74	Environmental
SPR-930	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
SPR-931	Route Location Noise Study and Analysis, M-275 (I-96 and I-696 Northerly to M-59)	M. E. Scarlata	Jul-74	Environmental
SPR-932	Air Quality Report for I-69 From US-27 to Morrice, Clinton and Shiawassee Counties	Michigan State Highway Commission	Jul-74	Environmental
SPR-933	Air Quality Report for US-31 Berrien County North from Indiana Line	Michigan State Highway Commission	Aug-74	Environmental
SPR-934	Annual Studded Tire Survey, Winter 1973-1974	R. L. Felter, P. M. Schafer	Aug-74	Pavement Design & Pavement Performance
SPR-935	Steel Strength Determination – Six Bridges	M. A. Chiunti	Sep-74	Bridge & Special Structures Design
SPR-936	Evaluation of Liquid Ice Control Chemicals Applied to Bridge Decks (Progress Report)	J. H. DeFoe	Sep-74	Bridge & Special Structures Design
SPR-937	Air Quality Report for M-275 From I-96 and I-696 to M-59	Michigan State Highway Commission	Sep-74	Environmental
SPR-938	Field Inspection of Telespar Sign Posts, “Watch for Ice on Bridge,” Type	A. J. Permoda	Sep-74	Bridge & Special Structures Design
SPR-939	The Housel Model for Slope Stability Analysis	J. M. Portigo	Oct-74	Systems, Maintenance & Operations
SPR-940	“Kling-Strip” Highway Striping Remover from Pert Products Company of Detroit	A. J. Permoda, A. R. Gabel	Oct-74	Materials
SPR-941	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
SPR-942	Traffic Noise Level Predictor Computer Program	G. H. Grove	Oct-74	Systems, Maintenance & Operations
SPR-943	Experimental Concrete and Bituminous Shoulders	M. A. Chiunti, K. S. Bancroft	Oct-74	Geotechnical & Foundataion Design
SPR-944	Summaries of Michigan Pavement Skid Resistance, 1973 Test Program	Michigan State Highway Commission	Oct-74	Pavement Design & Pavement Performance
SPR-945	Evaluation of Salvaged Base Course Materials	J. H. DeFoe	Nov-74	Materials
SPR-946	Simplified Technique for Traffic Noise Level Estimation	G. H. Grove, M. E. Scarlata	Dec-74	Environmental
SPR-947	Investigation of Traffic-Induced Vibrations at the Mary Roy Residence, Marine City	M. A. Davison	Dec-74	Environmental
SPR-948	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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Report Number	Title	Author	Publication Date	Category
SPR-949	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
SPR-950	Upson Laminated Cellulose Fiber Boards for Use as Road-Side Sign Panels	M. A. Chiunti	Dec-74	Materials
SPR-951	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
SPR-952	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
SPR-953	An Overview of the Roadway Surface-Tire Pattern Interaction Noise System	G. H. Grove	Mar-75	Environmental
SPR-954	Guardrail Wood Post Deterioration	A. R. Gabel, J. L. McKenna	Jan-75	Materials
SPR-955	Investigation of Traffic-Induced Vibrations at 3018 Woodruff Street, Lansing	C. J. Arnold, M. A. Davidson	Jan-75	Environmental
SPR-956	Laboratory Evaluation of "Elastizell" as a Lightweight Fill	R. C. Mainfort	Jan-75	Materials
SPR-957	1974 Performance Tests of "Fast-Dry" White and Yellow Pavement Marking Paints	A. J. Permoda	Feb-75	Materials
SPR-958	Priority Rating for Replacement of Aluminum-Post Bridge Rail	C. J. Arnold, M. A. Chiunti	Mar-75	Bridge & Special Structures Design
SPR-959	Air Quality Report for M-21 in Lapeer and St. Clair Counties	Michigan State Highway Commission	Apr-75	Environmental
SPR-960	Response to I-75 City of Taylor Noise Complaint	K. A. Allemeier	Apr-75	Environmental
SPR-961	Cement Content of Low Strength, Type 1P, Concrete	C. V. Iansiti, H. L. Patterson	Apr-75	Pavement Design & Pavement Performance
SPR-962	Transverse Cracking Reflected Through Asphaltic Concrete Resurfacing	C. A. Zapata	May-75	Pavement Design & Pavement Performance
SPR-963	Development of Soil-Support Values and Coefficients of Relative Strength of Michigan Highway Support Materials	R. C. Mainfort	May-75	Environmental
SPR-964	Michigan's Accident Experience with Glass Bead License Plate Reflectorization	L. F. Holbrook	Jun-75	Transportation Safety
SPR-965R	Air Quality Report for I-69, Charlotte to I-96, Eaton County	Michigan State Highway Commission	Jul-75	Environmental
SPR-966R	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
SPR-967	Evaluation of Various Bridge Deck Joint Sealing Systems	F. J. Bashore	Aug-75	Bridge & Special Structures Design
SPR-968	Development of Procedures for Replacing Joints in Concrete Pavement	J. E. Simonsen	Aug-75	Pavement Design & Pavement Performance

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

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SPR-989	Feasibility Study to Convert Regular-Dry Traffic Paint Applicator to Fast-Dry	A. J. Permoda	Feb-76	Materials
SPR-990	Fiberglass Reinforced Pultrusions	M. A. Chiunti	Feb-76	Materials
SPR-991	Subbase Drainage Criteria	F. T. Hsia	Mar-76	Roadway Design
SPR-992	Corridor Air Quality Report for Proposed M-59 – Utica to I-94	Michigan State Highway Commission	Feb-76	Environmental
SPR-993	Strength Comparison Between Water Reducer Concretes of Portland-Pozzolan and Type 1A Cements	H. L. Patterson	Mar-76	Pavement Design & Pavement Performance
SPR-994	Accident Rates and Surface Properties – An Investigation of Relationships	L. R. Holbrook	Oct-76	Pavement Design & Pavement Performance
SPR-995	A Literature Survey of Median Barriers and Highway Safety	L. F. Holbrook, W. H. Kuo	Apr-76	Transportation Safety
SPR-996	Comparative Performance of Contraction Joints on I-75, Saginaw and Genesee Counties	F. Copple	Apr-76	Pavement Design & Pavement Performance
SPR-997	Investigation of Straw Fire Damage to CRCP, I-96 Near Novi (I 63191-03586A)	W. K. Kruger	Apr-76	Pavement Design & Pavement Performance
SPR-998	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
SPR-999	CMI Autograde Pavement Profiler	F. Copple	May-76	Pavement Design & Pavement Performance
SPR-1000	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
SPR-1001	Development and Evaluation of a Field Drainability Test Method	E. C. Novak, Jr.	Jun-76	Systems, Maintenance & Operations
SPR-1002	Bulkhead Joints for Concrete Base Shoulders (Final Report)	M. A. Chiunti	May-76	Geotechnical & Foundataion Design
SPR-1003	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co., Pit No. 34-4 (Testing Laboratory Sample 75 A-2501)	R. W. Muethel	May-76	Materials
SPR-1004	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co., Pit No. 32-4 (Testing Laboratory Sample 75 A-2500)	R. W. Muethel	May-76	Materials
SPR-1005	Evaluation of Four Organic Resin Binder Systems	H. L. Patterson	Nov-76	Materials
SPR-1006	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
SPR-1007	Petrographic Analysis of Coarse Aggregate: Construction Aggregates Corp., Pit No. 70-9 (Testing Laboratory Sample 75 A-2162)	R. W. Muethel	Apr-76	Materials
SPR-1008	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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SPR-1009	1975 Performance Tests of "Fast-Dry" White and Yellow Pavement Marking Paints	A. J. Permoda	Jul-76	Materials
SPR-1010	Petrographic Analysis of Coarse Aggregate: Lindberg Pit No. 22-29 (Testing Laboratory Sample 75 A-410)	R. W. Muethel	Jun-76	Materials
SPR-1011	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
SPR-1012	Bridge Deck Repair and Development of Procedures for Epoxy Injection Grouting of Bridge Deck Delaminations	H. L. Patterson	Jul-76	Bridge & Special Structures Design
SPR-1013	An Inventory of Traffic Noise Levels Along Limited Access Freeways in Michigan	G. H. Grove, M. E. Scarlata	Sep-76	Environmental
SPR-1014	High-Index, Wet-Performance Glass Beads for Pavement Markings From Potter Brothers	A. J. Permoda	Jul-76	Materials
SPR-1015	"Snow-Glow" Glass Beads for Pavement markings From Snowfast Company of Italy	A. J. Permoda	Jul-76	Materials
SPR-1016	Experimental Short Slab Pavements (Construction Report)	M. A. Chiunti	Aug-76	Pavement Design & Pavement Performance
SPR-1017	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
SPR-1018	Steel Sampling, 76 Structures	C. J. Arnold	Aug-76	Bridge & Special Structures Design
SPR-1019	Expansion Anchor Evaluation, Hilti HDI Anchors	C. J. Arnold	Aug-76	Materials
SPR-1020	Development of Procedures for Replacing Joints in Concrete Pavement, Final Report	J. E. Simonsen	Sep-76	Pavement Design & Pavement Performance
SPR-1021	Reflectorized Flagman Vests	G. M. Smith, M. H. Janson	Sep-76	Systems, Maintenance & Operations
SPR-1022	Effects of Deicing Salts on the Chloride Levels in Water and Soil Adjacent to Roadways	R. W. Muethel	Oct-76	Environmental
SPR-1023	Air Quality Report for Davison Freeway, City of Highland Park, Wayne County	Michigan State Highway Commission	Oct-76	Environmental
SPR-1024	Aggregate Gradation Quality Control	W. H. Kuo	Nov-76	Materials
SPR-1025	Thickness Equivalencies for Asphalt-Treated and Untreated Aggregate Base Course Layers	F. T. Hsia	Nov-76	Materials
SPR-1026R	Air Quality Report for M-99 In Ingham and Clinton Counties	Michigan State Highway Commission	Dec-78	Environmental
SPR-1027	Progress Report on the Evaluation of Various Types of Railroad Crossings	J. E. Simonsen	Nov-76	Multi-Modal
SPR-1028	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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SPR-1029	Steel Evaluation of Vehicle-Damaged Structure (S08 of 39022), 38 th Street Over I-94 Near Kalamazoo	J. D. Culp	Nov-76	Bridge & Special Structures Design
SPR-1030	Performance Evaluation of Trinidad Asphalt Cement for Bituminous Concrete Resurfacing	C. A. Zapata	Nov-76	Pavement Design & Pavement Performance
SPR-1031	Air Quality Report for the Reconstruction of I-94 BL Southwest of Battle Creek, Calhoun County	Michigan State Highway Commission	Nov-76	Environmental
SPR-1032	Petrographic Analysis of Coarse Aggregate: Gaspardo Pit No. 31-65 (Testing Laboratory Sample 75 A-1121)	R. W. Muethel	Dec-76	Materials
SPR-1033	Galvanized Steel Reinforced Concrete Bridge Decks, Progress Report	C. J. Arnold	Dec-76	Bridge & Special Structures Design
SPR-1034	Control and Prevention of Deterioration of Concrete Bridge Decks	M. G. Brown	Dec-76	Bridge & Special Structures Design
SPR-1035	Experimental Concrete and Bituminous Shoulders, Progress Report	K. S. Bancroft	Dec-76	Geotechnical & Foundataion Design
SPR-1036	Petrographic Analysis of Coarse Aggregate: Boyd Pit No. 54-54 (Testing Laboratory Sample 75 A-1625)	R. W. Muethel	Dec-76	Materials
SPR-1037R	Air Quality Report for US-12, City of Dearborn, Wayne County	Michigan State Highway Commission	Mar-79	Environmental
SPR-1038	Determination and Improvement of Relevant Pavement Skid Coefficients	F. Copple, P. T. Luce	Jan-77	Pavement Design & Pavement Performance
SPR-1039	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
SPR-1040	Statistical Analysis of Aggregate Base Course Inspection Using an End Result Aggregate Specification (Sampling, Testing and Acceptance Procedures)	W. H. Kuo	Feb-77	Materials
SPR-1041	Drainage and Foundation Studies for an Experimental Short Slab Pavement	T. M. Green, E. C. Novak, Jr.	Feb-77	Pavement Design & Pavement Performance
SPR-1042	Annual Report of Activities of the Michigan Department of State Highways and Transportation Research Laboratory	Michigan State Highway Commission	Jan-77	Administration & Management
SPR-1043	Edge Marking Criteria from Contrast Ratios	G. M. Smith	Feb-77	Pavement Design & Pavement Performance
SPR-1044	Construction of a Cold-Mix Emulsion Black Base	G. F. Sweeney	Feb-77	Pavement Design & Pavement Performance
SPR-1045	Effectiveness of the Experimental Wooden Noise Wall, Interstate Highway I-75, City of Allen Park, Michigan	G. H. Grove	Feb-77	Environmental
SPR-1046	Comparison Study on the Performance of Bituminous Stabilized Bases (M-66 and M-20)	F. T. Hsia	Feb-77	Pavement Design & Pavement Performance
SPR-1047	Brightness Study and Specification Compliance Survey of Arrow-Bar Traffic Control Signs	J. D. Truax, M. E. Scarlata	Jun-77	Systems, Maintenance & Operations
SPR-1048	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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Report Number	Title	Author	Publication Date	Category
SPR-1049	Summaries of Michigan Pavement Skid Resistance, 1975 Test Program, MDSHT Report No. 249	Michigan State Highway Commission	Feb-77	Pavement Design & Pavement Performance
SPR-1050	Lincore Ni2 Low Alloy Submerged Arc Welding Wire	J. D. Culp	Mar-77	Materials
SPR-1051	Mixed-in-Place Stabilization of Highway Base Aggregates and Pulverized Bituminous Surfacing Using Asphalt Stabilizers, Final Report	J. H. DeFoe	Mar-77	Materials
SPR-1052	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
SPR-1053	Experimental Lightweight Fill, Construction Report	E. C. Novak, Jr.	Mar-77	Pavement Design & Pavement Performance
SPR-1054	Petrographic Analysis of Coarse Aggregate: American Aggregates Corp. Milford Pit. No. 63-97	R. W. Muethel	Mar-77	Materials
SPR-1055	Petrographic Analysis of Coarse Aggregate: Mickelson No. 3 Pit No. 63-88	R. W. Muethel	Mar-77	Materials
SPR-1056	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Mar-77	Materials
SPR-1057	Evaluation of Five Commercial Fast-Setting Patching Mortars	K. H. Laaninen	Mar-77	Pavement Design & Pavement Performance
SPR-1058	Instruction Manual for Bridge Deck Delamination Detector	Michigan State Highway Commission	Apr-77	Bridge & Special Structures Design
SPR-1059	Petrographic Analysis of Analysis of Coarse Aggregate: Emmons Pit No. 54-22	R. W. Muethel	Apr-77	Materials
SPR-1060	Petrographic Analysis of Coarse Aggregate: Glancy Pit No. 62-3	R. W. Muethel	Apr-77	Materials
SPR-1061	Evaluation of Prewetted Salt for Ice Control, Final Report	J. H. DeFoe	May-77	Materials
SPR-1062	Interim Report on Epoxy Injection Grouting Experimental Repair Procedure	H. L. Patterson	Jul-77	Materials
SPR-1063	Preventive Maintenance of Concrete Pavement - US-127, Progress Report	J. E. Simonsen	Jun-77	Pavement Design & Pavement Performance
SPR-1064	Elastizell Concrete Lightweight Fill Construction (Pine River Bridge, St. Clair)	E. C. Novak, Jr.	Jun-77	Materials
SPR-1065	Maintenance of Neoprene Sealed Concrete Pavements, First Progress Report	J. E. Simonsen, F. J. Bashore, A. W. Price	Jul-77	Pavement Design & Pavement Performance
SPR-1066	Raised Pavement Markers	Mr. H. Janson, G. M. Smith, J. D. Truax, M. J. Tiedt	Jul-77	Transportation Safety
SPR-1067	Epoxy Resin Coated Reinforcing Steel, Construction and Progress Report	C. J. Arnold	Jun-77	Materials
SPR-1068	An Accident Frequency Prediction Model for Selected State Trunkline Classifications	W. H. Kuo	Dec-77	Roadway Design

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SPR-1069	Fibco 'Mod II' Portable Truck Barrier	J. F. Caudell	Dec-77	Materials
SPR-1070	Petrographic Analysis of Coarse Aggregate: Marblehead Quarry, Marblehead, Ohio	R. W. Muethel	Aug-77	Materials
SPR-1071	Petrographic Analysis of Coarse Aggregate: Pickitt No. 1 Pit No. 34-26	R. W. Muethel	Aug-77	Materials
SPR-1072	A Study of Supplemental Drainage Methods for Preventing Frost Heave in Full Depth Concrete Shoulders	E. C. Novak, Jr.	Sep-77	Geotechnical & Foundaion Design
SPR-1073	Report on Commission Auditor's Recommendations Nos. 25, 27, 28	Michigan State Highway Commission	Aug-77	Administration & Management
SPR-1074	Air Quality Report for M-153 in the Cities of Westland and Garden City, Wayne County	Michigan State Highway Commission	Aug-77	Environmental
SPR-1075	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
SPR-1076	Evaluation of Nuclear Methods for Measuring Asphalt Content of Bituminous Mixtures	J. H. DeFoe	Dec-77	Systems, Maintenance & Operations
SPR-1077	Low Slump Portland Cement Concrete Bridge Deck Overlays	K. H. Laaninen	Jan-78	Bridge & Special Structures Design
SPR-1078	Evaluation of Sulfur-Asphalt Binder for Bituminous Resurfacing Mixtures, Progress Report	J. H. DeFoe	Jan-78	Materials
SPR-1079	Second Progress Report on the Evaluation of Various Types of Railroad Crossings	J. E. Simonsen	Mar-78	Multi-Modal
SPR-1080	Petrographic Analysis of Coarse Aggregate: Champion , Inc., Moon Lake Pit No. 22-4	R. W. Muethel	Jan-78	Materials
SPR-1081	A Report on the Cause of Deterioration of Sections of Flexible I-94 Pavement	E. C. Novak, Jr.	Feb-78	Pavement Design & Pavement Performance
SPR-1082	Annual Report of Activities of the Michigan Department of State Highways and Transportation Research Laboratory	Michigan State Highway Commission	Feb-78	Administration & Management
SPR-1083	Petrographic Analysis of Coarse Aggregate: Arthur #2 Pit No. 72-5	R. W. Muethel	May-05	Materials
SPR-1084	Petrographic Analysis of Coarse Aggregate: Champion, Inc. Dishneau Pit No. 52-1	R. W. Muethel	May-05	Materials
SPR-1085	Summaries of Michigan Pavement Skid Resistance, 1976 Test Program	Michigan State Highway Commission	Mar-78	Pavement Design & Pavement Performance
SPR-1086	Petrographic Analysis of Coarse Aggregate: U. S. Forest Service Pit No. 27-68	R. W. Muethel	Mar-78	Materials
SPR-1087	Evaluation of Expansion Anchors, Self-Drilling, Torque Type, and Stud-Type	K. S. Bancroft	Apr-78	Materials
SPR-1088	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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SPR-1089	Evaluation of Monoslabs for Paving of Ditches and Service Drives	S. L. Purdy	Apr-78	Pavement Design & Pavement Performance
SPR-1090	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
SPR-1091	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
SPR-1092	Air Quality Report for I-69 in Ingham, Clinton, and Shiawassee Counties	Michigan State Highway Commission	Jun-78	Environmental
SPR-1093	Petrographic Analysis of Coarse Aggregate: Paquin Gravel Co. #2, Pit No. 21-19	R. W. Muethel	Jun-78	Materials
SPR-1094	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
SPR-1095	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
SPR-1096	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
SPR-1097	Study of Latex Modified concrete Deterioration on Wiard Road Over US-27 (S04 of 81063)	M. G. Brown	Sep-78	Pavement Design & Pavement Performance
SPR-1098	The Michigan Department of Transportation Circular Wear Track-Results of Preliminary Aggregate Polishing Tests, First Progress Report	R. W. Muethel	Mar-79	Materials
SPR-1099	Air Quality Measurements of Movable Asphalt Plants for Recycling Paving Asphalt	J. T. Ellis	Nov-78	Environmental
SPR-1100	Salt Degradation Study	L. T. Oehler	Nov-78	Materials
SPR-1101	Investigation of Parking Ramp Leakage Through the Upper Level Slab at the Capitol Complex	H. L. Patterson	Dec-78	Pavement Design & Pavement Performance
SPR-1102	Traffic Signal Dimming Methods	J. D. Truax, G. M. Smith, M. H. Janson	Jan-79	Systems, Maintenance & Operations
SPR-1103	Inspection of Low Slump and Latex Modified Overlays on I-94 in the Detroit Area	M. G. Brown	Dec-78	Pavement Design & Pavement Performance
SPR-1104	Air Quality Report for M-51 Relocation – Berrien County	N/A	Jan-79	Environmental
SPR-1105	Air Quality Report for US-31, Berrien County	N/A	Jan-79	Environmental
SPR-1106	A Survey of Median Barriers and Highway Safety	L. F. Holbrook, W. H. Kuo	Jan-79	Transportation Safety
SPR-1107	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
SPR-1108	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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SPR-1109	Summaries of Michigan Pavement Friction Measurements, 1977 Test Program	P. M. Schafer	Apr-79	Pavement Design & Pavement Performance
SPR-1110	Astro Optics Delineators	M. H. Janson	Mar-79	Systems, Maintenance & Operations
SPR-1111	NFS Industries Delineators	M. H. Janson	Mar-79	Systems, Maintenance & Operations
SPR-1112	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	N/A	Mar-79	Administration & Management
SPR-1113	Evaluation of Various Types of Railroad Crossings, Third Progress Report	J. E. Simonsen	Apr-79	Multi-Modal
SPR-1114	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
SPR-1115	Performance Evaluation of Non-Reinforced Ramps	L. T. Oehler	Apr-79	Pavement Design & Pavement Performance
SPR-1116	Anti-Glare Screen Median Fence	J. D. Truax, G. M. Smith	May-79	Transportation Safety
SPR-1117	Effectiveness of Infrared Joint Heaters for Bituminous Pavements	J. H. DeFoe	May-79	Pavement Design & Pavement Performance
SPR-1118	A Probability Model for Determining the Safety Benefits of Median Barrier Installations	W. H. Kuo	May-79	Transportation Safety
SPR-1119	Development of Base Layer Thickness Equivalency	S. S. Kuo	Jun-79	Materials
SPR-1120	Continuously Reinforced Concrete Pavement in Michigan, A Historical Summary	J. E. Simonsen	Jun-79	Pavement Design & Pavement Performance
SPR-1121	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
SPR-1122	Effectiveness of Neoprene Seals in Preventing Concrete Pavement Contraction Joint Deterioration	F. J. Bashore, A. W. Price	Jul-79	Pavement Design & Pavement Performance
SPR-1123	Alternate, More Economical Repainting Systems for Bridge Structural Steel, First Progress Report	F. J. Bashore, A. J. Permoda	Jul-79	Bridge & Special Structures Design
SPR-1124	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
SPR-1125	Performance Evaluation of Mirafi 140 Fabric as Overlay Reinforcement to Control Reflection Cracking	C. A. Zapata	Jul-79	Materials
SPR-1126	Investigation of Pavement Problems on I-275	Michigan Trans. Commission	Oct-79	Pavement Design & Pavement Performance
SPR-1127	Texturing Existing Concrete Pavement	P. T. Luce	Oct-79	Pavement Design & Pavement Performance
SPR-1128	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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SPR-1129	Evaluation of Sulfur-Asphalt Binder Bituminous Paving Mixtures, Progress Report	J. H. DeFoe	Nov-79	Pavement Design & Pavement Performance
SPR-1130	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
SPR-1131	Stimsonite Delineator	G. M. Smith	Dec-79	Systems, Maintenance & Operations
SPR-1132	The Michigan Department of Transportation Circular Wear Track–Results of Supplemental Aggregate Polishing Tests, Interim Progress Report	R. W. Muethel	Jan-80	Materials
SPR-1133	Precisions of the Aggregate Sample Splitter and Testing Method	W. H. Kuo	Nov-80	Materials
SPR-1134	Evaluation of Sprinkle Treatment for Improving Skid Resistance of Asphalt Surfaces, Progress Report	J. H. DeFoe	Jan-80	Pavement Design & Pavement Performance
SPR-1135	Reflectorized Traffic Regulator Vests, Progress Report	M. H. Janson, G. M. Smith, J. D. Truax	Apr-80	Systems, Maintenance & Operations
SPR-1136	Petrographic Analysis of Coarse Aggregate: County Road Commission No. 3, Pit No. 17-62	R. W. Muethel	Feb-80	Materials
SPR-1137	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
SPR-1138	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
SPR-1139	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-80	Administration & Management
SPR-1140	Summaries of Michigan Pavement Friction Measurements (1978 Test Program)	P. M. Schafer	Mar-80	Pavement Design & Pavement Performance
SPR-1141	Preventive Maintenance of Concrete Pavements – US-27, Final Report	J. E. Simonsen	Apr-80	Pavement Design & Pavement Performance
SPR-1142	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
SPR-1143	Investigation of Popout Problems on M-14	L. T. Oehler	May-80	Pavement Design & Pavement Performance
SPR-1144	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
SPR-1145	Evaluation of Various Types of Railroad Crossings, Fourth Progress Report	J. E. Simonsen	May-80	Multi-Modal
SPR-1146	Blended Aggregates Tested on the Michigan Department of Transportation Circular Wear Track	R. W. Muethel	May-80	Materials
SPR-1147	Evaluation of 22A Gradation Open Hearth Slag as a Base and Subbase Construction Material, Final Report	J. H. DeFoe	May-80	Materials
SPR-1148	Air Quality Report for the Ambassador Bridge Tourist Information Center	Michigan Trans. Commission	Jul-80	Environmental

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SPR-1149	Petrographic Analysis and Insoluble Residue Determination of Coarse Aggregate: Thornton Quarry, Pit No. 21-67	R. W. Muethel	Jul-80	Materials
SPR-1150	Performance Evaluation of Trinidad Asphalt Cement for Bituminous Concrete Resurfacing, Final Report	C. A. Zapata	Jul-80	Pavement Design & Pavement Performance
SPR-1151	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
SPR-1152	Base and Subbase Properties Affecting Longitudinal Cracking of I-275	Michigan Trans. Commission	Apr-81	Pavement Design & Pavement Performance
SPR-1153	Air Quality Report for M-59 in Macomb County	Michigan Trans. Commission	Sep-80	Environmental
SPR-1154	Screened Legend Quality of Signs from Michigan State Industries and a Review of Screening Materials	M. H. Janson	Sep-80	Materials
SPR-1155	Weathering Steel Guardrail – A Materials Performance Evaluation	R. L. McCrum, C. J. Arnold	Nov-80	Materials
SPR-1156	Study of Cores for Potential Recycled Concrete Pavement	R. W. Muethel	Mar-81	Pavement Design & Pavement Performance
SPR-1157	Air Quality Measurements of Moveable Asphalt Plants for Recycled Paving Asphalt, Progress Report	J. T. Ellis	Nov-80	Environmental
SPR-1158	The Relationship of Aggregate Durability to Concrete Pavement Performance, and the Associated Effects of Base Drainability	C. J. Arnold	Jan-81	Materials
SPR-1159	Petrographic Analysis of Coarse Aggregate: Salem Gr. Construction Co. Pit No. 63-56	R. W. Muethel	Jan-81	Materials
SPR-1160	Evaluation of Cold-Mix Emulsion Black Base at the Secondary Complex, Final Report	L. T. Oehler	Feb-81	Pavement Design & Pavement Performance
SPR-1161	Weatherability of Map Displays	Michigan Trans. Commission	Feb-81	Tourism
SPR-1162	Airport Beacon L-801A Photometric Test	Michigan Trans. Commission	Mar-81	Multi-Modal
SPR-1163	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-81	Administration & Management
SPR-1164	Evaluation of Timber Piles from Fort Street Bridge	C. J. Arnold, M. A. Chiunti	Mar-81	Bridge & Special Structures Design
SPR-1165	Simplified Technique for Traffic Noise Level Estimation	F. W. Harwood, M. E. Scarlata	Apr-81	Environmental
SPR-1166	Air Quality Report for M-275 in Oakland County	Michigan Trans. Commission	Apr-81	Environmental
SPR-1167	American Decal Reflective Sheeting	M. H. Janson	Apr-81	Materials
SPR-1168	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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SPR-1169	Jointed Concrete Pavements-Design, Performance and Repair	C. J. Arnold, M. A. Chiunti, K. S. Bancroft	May-81	Pavement Design & Pavement Performance
SPR-1170	Summaries of Michigan Pavement Friction Measurements (1979 Test Program)	P. M. Schafer	May-81	Pavement Design & Pavement Performance
SPR-1171	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
SPR-1172	Petrographic Analysis of Coarse Aggregate Extracted from Bituminous Pavement Cores, M-55, Control Section No. 83021, 16035A	R. W. Muethel	Jun-81	Materials
SPR-1173	Surface Texture Measurements by the Putty Impression Method	C. A. Zapata	Jun-81	Pavement Design & Pavement Performance
SPR-1174	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Jun-81	Materials
SPR-1175	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
SPR-1175A	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
SPR-1176	Petrographic Analysis of Crushed Stone Coarse Aggregate: Michigan Foundation Pit No. 82-6	R. W. Muethel	Jul-81	Materials
SPR-1177	Airport Beacon L-801A Photometric Test	Michigan Trans. Commission	Aug-81	Multi-Modal
SPR-1178	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
SPR-1179	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
SPR-1180	Fasign Reflective Sheeting	M. H. Janson	Dec-81	Materials
SPR-1181	Kiwalite Reflective Sheeting	M. H. Janson	Sep-81	Materials
SPR-1182	Air Quality Measurements of Moveable Asphalt Plants for Recycling Paving Asphalt (Interim Report for 1981)	J. T. Ellis	Nov-81	Environmental
SPR-1183	Evaluation of 'Monoslabs' for Paving Ditches and Service Drives (Final Report)	J. H. DeFoe	Nov-81	Pavement Design & Pavement Performance
SPR-1184	Implementation of Modern Statistical Methods for Improving the Accuracy of Highway Laboratory and Field Data, A Manual	W. H. Kuo	Mar-82	Planning
SPR-1185	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
SPR-1186	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
SPR-1187	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-82	Administration & Management

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SPR-1188	Degradation of Steel Furnace Slag as an Open Graded Base Course for Concrete Pavement	E. C. Novak, Jr.	Feb-82	Materials
SPR-1189	Evaluation of Sulphlex as a Binder in Pavement Resurfacing Mixtures, Progress Report	J. H. DeFoe	Feb-82	Materials
SPR-1190	Petrographic Analysis of Combined Crushed and Natural Gravel Coarse Aggregate: M.Glancy Pit No. 60-29	R. W. Muethel	Mar-82	Materials
SPR-1191	Early Cracking of a Bituminous Concrete Section of US-2 Located in District 2	E. C. Novak, Jr.	Apr-82	Pavement Design & Pavement Performance
SPR-1192	Petrographic Analysis of Crushed Stone Coarse Aggregate: Gogebic Range Ski Corp. Pit No. 27-74	R. W. Muethel	Mar-82	Materials
SPR-1193	Evaluation of Various Types of Railroad Crossings, Fifth Progress Report	J. E. Simonsen	Apr-82	Multi-Modal
SPR-1194	Frost Heave Investigation of I-275	E. C. Novak, Jr.	Apr-82	Pavement Design & Pavement Performance
SPR-1195	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>
SPR-1197	Static and Dynamic Properties of Anchor Bolts for Sign Supports	C. J. Arnold, D. F. Johnson, M. A. Chiunti	Jun-82	Materials
SPR-1198	Concrete Pavement Cracking, Interim Report	R. L. Felter	Jun-82	Pavement Design & Pavement Performance
SPR-1199	Post-Construction Air Quality Monitoring for M-99 in Lansing	Michigan Trans. Commission	Jul-82	Environmental
SPR-1200	Evaluation of Slurry Seal Surface Treatment for Application on the Mackinac Bridge	R. L. Felter, J. E. Norton	Jul-82	Bridge & Special Structures Design
SPR-1201	Evaluation of ClaPak and ClaSet as Soil stabilizing Agents	R. C. Mainfort, J. H. DeFoe	Jul-82	Environmental
SPR-1202	Evaluation of Noise Barriers on I-275 for Structural and Visual Integrity (I-96/I-275 Interchange, Northeast Quadrant and I-275 from Kippernick Rd. to Edw. Hines Dr.)	F. W. Harwood, K. S. Bancroft	Jul-82	Environmental
SPR-1203	Further Evaluation of Black Base and Aggregate Base Construction (M-20 and M-66)	R. C. Mainfort	Aug-82	Materials
SPR-1204	Use of Deflection Basin Characteristics for Flexible Pavement Analysis and Overlay Design	J. H. DeFoe	Sep-82	Systems, Maintenance & Operations
SPR-1205	ASTM E501 Test Tire Correlation, B. F. Goodrich vs. McCreary	P. T. Luce	Nov-82	Materials
SPR-1206	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Nov-82	Materials
SPR-1207	Petrographic Analysis of Coarse Aggregate: Wallace Stone Co. Pit No. 32-4	R. W. Muethel	Nov-82	Materials

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SPR-1208	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
SPR-1209	Use of Recycled Asphalt Material in the Construction of a Bituminous Stabilized Base, I-75, Cheboygan County	J. H. DeFoe	Nov-82	Materials
SPR-1210	Evaluation of the Straight Line Gradation Chart and the Particle Index Test	Michigan Trans. Commission	Apr-82	Materials
SPR-1211	Infiltration of Subbase Sand into Open Graded Drainage Course (OGDC) Bases	E. C. Novak, Jr.	Apr-83	Materials
SPR-1212	Alternate Repainting Systems for Bridge Structural Steel	F. J. Bashore	Mar-83	Bridge & Special Structures Design
SPR-1213	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-83	Administration & Management
SPR-1214	Air Quality Measurements for Movable Asphalt Plants for Recycling Paving Asphalt	J. T. Ellis	Mar-83	Environmental
SPR-1215	Revenue Service Brake Lining Temperature Measurements for a Retarder Equipped Bus	L. E. DeFrain	Mar-83	Materials
SPR-1216	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
SPR-1217	Benkelman Beam Testing of Shoulder and Pavement Recycling Projects	J. H. DeFoe	Mar-83	Geotechnical & Foundataion Design
SPR-1218	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>
SPR-1220	Evaluation of Sulfur-Asphalt Binder for Bituminous Resurfacing Mixtures	J. H. DeFoe	May-83	Pavement Design & Pavement Performance
SPR-1221	Evaluation of Breakaway Cable Terminal Endings on Guardrail	B. W. Ness	May-83	Transportation Safety
SPR-1222	Evaluation of Various Types of Railroad Crossings, Sixth Progress Report	J. E. Simonsen	May-83	Multi-Modal
SPR-1223	Evaluation of Sprinkle Treatment for Improving Skid Resistance of Asphalt Surfaces, Final Report	J. H. DeFoe	May-83	Pavement Design & Pavement Performance
SPR-1224	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>
SPR-1226	Stabilized Fly Ash as Lightweight Fill	Michigan Trans. Commission	Jun-83	Materials
SPR-1227	High Density Concrete Deck Overlay with Superplasticizer	M. G. Brown	Jun-83	Pavement Design & Pavement Performance

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SPR-1228	The Michigan Department of Transportation Circular Wear Track—Results of Supplemental Aggregate Polishing Tests, Interim Progress Report	R. W. Muethel	Apr-84	Materials
SPR-1229	Scan 16 – Moisture, Frost, Ice Early Warning System, First Progress Report	F. M. Spica	Apr-84	Systems, Maintenance & Operations
SPR-1230	Determination of Mean Vehicle Noise Emission Levels in Michigan	F. W. Harwood, K. S. Bancroft, R. J. Holcom	Jul-83	Environmental
SPR-1231	Evaluation of Cast-in-Place Joint Repairs in Concrete Pavement	C. A. Zapata	Jul-83	Pavement Design & Pavement Performance
SPR-1231B	Evaluation of Cast-in-Place Joint Repairs in Concrete Pavement	C. A. Zapata	Jul-83	Pavement Design & Pavement Performance
SPR-1232	An Aggregate Wear Index Reduction Factor for Uncrushed Material in Gravel, Summary Report	R. W. Muethel	Jul-83	Materials
SPR-1233	Load Carrying Capacity of I-75 Bituminous Shoulders in the Flint Area	Michigan Trans. Commission	Jul-83	Geotechnical & Foundaion Design
SPR-1234	Petrographic Analysis of Coarse Aggregate: Michigan Stone Co. Pit No. 58-3	R. W. Muethel	Jul-83	Materials
SPR-1235	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>
SPR-1237	Performance Evaluation of an Experimental Study Seal Emission as Primer of 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
SPR-1238	Comparison of Aggregate and Bituminous Treated Bases I-75 South of Grayling	R. C. Mainfort, E. C. Novak, Jr.	Mar-84	Materials
SPR-1239	Evaluation of Sulphlex as a Binder in Pavement Resurfacing Mixtures, Final Report	J. H. DeFoe	Mar-84	Materials
SPR-1240	Petrographic Analysis of Dense-Graded Gravel Aggregate: Butkovich #2 Pit No. 49-74	R. W. Muethel	Mar-84	Materials
SPR-1240(1)	Petrographic Analysis of Dense-Graded Gravel Aggregate: Garfield #2 Pit No. 49-104	R. W. Muethel	Mar-84	Materials
SPR-1240(2)	Petrographic Analysis of Dense-Graded Gravel Aggregate: Ozanich Pit No. 49-97	R. W. Muethel	Mar-84	Materials
SPR-1240(3)	Petrographic Analysis of Dense-Graded Gravel Aggregate: Peters Pit No. 49-23	R. W. Muethel	Mar-84	Materials
SPR-1240(4)	Petrographic Analysis of Dense-Graded Gravel Aggregate: DNR Pit. No. 49-101	R. W. Muethel	Mar-84	Materials
SPR-1241	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Mar-84	Administration & Management
SPR-1242	Field Trial of Continuous Asphalt Concrete Density Monitoring Devices, Final Report	J. H. DeFoe	Mar-84	Pavement Design & Pavement Performance

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SPR-1243	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
SPR-1244	Evaluation of Various Types of Railroad Crossings, Seventh Progress Report	J. E. Simonsen	Apr-84	Multi-Modal
SPR-1245	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
SPR-1246	Air Monitoring in the Vicinity of I-475 in the City of Flint	Michigan Trans. Commission	May-84	Environmental
SPR-1247	Flexible Delineator Posts	B. W. Ness	Jun-84	Systems, Maintenance & Operations
SPR-1248	Evaluation of Calcium Magnesium Acetate as an Ice Control Agent, Final Report	J. H. DeFoe	Jun-84	Materials
SPR-1249	Evaluation of Glare Screen	B. W. Ness, C. J. Arnold, M. A. Chiunti	Aug-84	Transportation Safety
SPR-1250	Monitoring Movement of the Zilwaukee Bridge	B. W. Ness	Jan-85	Bridge & Special Structures Design
SPR-1251	Field Trial of Foamed Asphalt Stabilization, Final Report	Michigan Trans. Commission	Oct-84	Materials
SPR-1252	Scan 16 – Moisture, Frost, Ice Early Warning System, Final Report	F. M. Spica	Oct-84	Systems, Maintenance & Operations
SPR-1253	An Examination of Studies Which Investigate the Question of Accident Reduction Through Full License Plate Reflectorization	L. F. Holbrook	Oct-84	Transportation Safety
SPR-1254	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
SPR-1255	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
SPR-1256	1976-1982 Performance Tests of "Fast Dry" White and Yellow Pavement Marking Paints	F. J. Bashore	Jan-85	Materials
SPR-1257	Cost and Energy Considerations Involved in the Recycling of Portland Cement Concrete	F. Cople	Jun-86	Materials
SPR-1258	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
SPR-1259	Improved Joint Sealant Materials for Concrete Pavements, Construction Report	J. W. Simonsen, A. W. Price	Feb-85	Pavement Design & Pavement Performance
SPR-1260	Solar Hot Water Systems in Michigan Rest Areas, Interim Report	F. W. Harwood, R. Holcom	May-85	Tourism
SPR-1261	Annual Report of Activities of the Michigan Department of Transportation Research Laboratory	Michigan Trans. Commission	Apr-85	Administration & Management
SPR-1262	Performance Evaluation of Concrete Pavement Overlays (Construction Report)	J. E. Simonsen, A. W. Price	May-85	Pavement Design & Pavement Performance

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SPR-1263	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>
SPR-1266	Evaluation of Ground and Reclaimed Tire Rubber in Bituminous Resurfacing Mixtures	J. H. DeFoe	Oct-85	Materials
SPR-1267	Restoration and Preventive Maintenance of Concrete Pavements	J. E. Simonsen, A. W. Price	Oct-85	Pavement Design & Pavement Performance
SPR-1268	Experimental Settling and Skimming Chamber for I-69 Storm Sewer	Michigan Trans. Commission	Nov-85	Bridge & Special Structures Design
SPR-1269	Evaluation of Silane Treated Glass Beads in Polyester Pavement Marking Paint	F. J. Bashore, A.W. Price	Feb-86	Materials
SPR-1270	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
SPR-1271	Experimental Concrete and Bituminous Shoulders, Interim Report	V. T. Barnhart	Mar-85	Geotechnical & Foundataion Design
SPR-1272	Investigation of the Field Coating of Environmentally Exposed Weathering Steel, Interim Report	G. L. Tinklenberg	Feb-86	Bridge & Special Structures Design
SPR-1273	Polishing Resistance of Arenaceous Limestone from the Bayport Bedrock Formation	R. W. Muethel	Apr-86	Materials
SPR-1274	Use of Boni Fibers on M-99 in Lansing, Final Report	J. H. DeFoe	Jul-86	Pavement Design & Pavement Performance
SPR-1275	The Development of Michigan's Bridge Painting Specification	G. L. Tinklenberg	Jul-86	Bridge & Special Structures Design
SPR-1276	A Study to Evaluate the Performance of Bituminous Wearing Course Containing Sandy Limestone, Final Report	R. W. Muethel	Aug-86	Pavement Design & Pavement Performance
SPR-1277	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>
SPR-1279	Effects of Deicing Salts on the Chloride Levels in Water and Soil Adjacent to Roadways, Interim Progress Report	R. W. Muethel	Oct-86	Environmental
SPR-1280	Bridge Barrier Rail-to-Guardrail Anchoring System	L. J. Pearson	Oct-86	Bridge & Special Structures Design
SPR-1281	Evaluation of Lime, Fly Ash Base Course Mixtures – Construction Report	V. T. Barnhart	Jan-87	Materials
SPR-1282	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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SPR-1283	Static and Dynamic Properties of Anchor Bolts for Sign Supports, Final Report	B. R. Lower, L. J. Pearson	Jun-87	Materials
SPR-1284	Bridge Girder Butt Welds – Resistance to Brittle Fracture, Fatigue and Corrosion	J. D. Culp	Jan-88	Bridge & Special Structures Design
SPR-1285	Load Tests of the Zilwaukee Bridge, Final Report	S. R. Kulkarni	Nov-87	Bridge & Special Structures Design
SPR-1286	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>
SPR-1288	Investigation of Bituminous Compaction Requirements for Cold Weather Paving, Final Report	J. H. DeFoe	Dec-87	Pavement Design & Pavement Performance
SPR-1289	Evaluation of Boschung Ice Early Warning System	F. Spica	Mar-88	Systems, Maintenance & Operations
SPR-1290	Solar Hot Water Systems in Michigan Rest Areas, Second Report	F. Harwood, R. Holcom	Mar-88	Tourism
SPR-1291	Investigation of Steel Beam Guardrail Chemistries	C. J. Arnold, L. J. Pearson	May-88	Materials
SPR-1292	Concrete Pavement Restoration – Construction Report	J. E. Simonsen, A. W. Price	Sep-88	Pavement Design & Pavement Performance
SPR-1293	Comparison of Cracked and Uncracked Flexible Pavements in Michigan, Final Report	J. H. DeFoe	Oct-88	Pavement Design & Pavement Performance
SPR-1294	Low-Slump High-Density Concrete Bridge Deck Overlay	J. E. Simonsen	Oct-88	Bridge & Special Structures Design
SPR-1295	Corrosion Evaluation of Calcium Magnesium Acetate (CMA), Salt (NaCl), and CMA/Salt Solutions	R. L. McCrum	Dec-88	Materials
SPR-1296	Evaluation of Improved Calcium Magnesium Acetate as an Ice Control Agent, Final Report	J. H. DeFoe	Jan-89	Materials
SPR-1297	Calcium Carbonate Precipitate From Crushed Concrete	R. W. Muethel	Mar-89	Materials
SPR-1298	PCC Pavement Joint Restoration and Rehabilitation (FHWA NEEP Project 27), Final Report	J. E. Simonsen, A. W. Price	Jun-89	Pavement Design & Pavement Performance
SPR-1299	Battery Operated Strobelights	G. M. Smith	Mar-89	Systems, Maintenance & Operations
SPR-1300	Field Evaluation of Experimental Fabrics to Prevent Reflective Cracking in Bituminous Resurfacing, Final Report	V. T. Barnhart	Jul-89	Pavement Design & Pavement Performance
SPR-1301	Freeze-Thaw Evaluation of Selected Rock Types from a Composite Sample of Michigan Gravel	R. W. Muethel	Aug-89	Materials
SPR-1302	Inspection of Sign Support Structures	S. Jadun	Sep-89	Bridge & Special Structures Design

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SPR-1303	Performance Evaluation of Concrete Pavement Overlays, Final Report	J. E. Simonsen, A. W. Price	Dec-89	Pavement Design & Pavement Performance
SPR-1304	Legibility and Visibility of Retroreflective Sign Materials	R. E. Nordlund, D. C. Long, G. M. Smith, V. C. Andrews	Jan-90	Materials
SPR-1305	Evaluation of "Glasgrid" Bituminous Pavement Reinforcement	V. T. Barnhart	Mar-90	Pavement Design & Pavement Performance
SPR-1306	Evaluation of MDOT Maintenance Division Seal Coat Projects, Final Report	V. T. Barnhart	Jun-90	Materials
SPR-1307	Evaluation of Tensor Bituminous Pavement Reinforcement, Final Report	J. H. DeFoe	Oct-90	Pavement Design & Pavement Performance
SPR-1308	Evaluation of Ice Detection and Weather Information Systems, Progress Report	J. H. DeFoe, M. H. Close	Dec-90	Systems, Maintenance & Operations
SPR-1309	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
SPR-1310	Evaluation of Lime, Fly Ash Base Course Mixtures, Final Report	V. T. Barnhart	Jun-91	Materials
SPR-1311	Freeze-Thaw Durability and Pore Characteristics of the Major Rock Constituents in Glacial Gravel	R. W. Muethel	Jul-92	Materials
SPR-1312	Fine Aggregates Tested on the Michigan Department of Transportation Circular Wear Track	R. W. Muethel	Jul-91	Materials
SPR-1313	Evaluation of United Salt's Corrosion Inhibitor Intended for Use with Sodium Chloride Deicing Salt	R. L. McCrum, J. V. Heffernan	Sep-91	Materials
SPR-1314	Determination of the Slip Coefficient for Organic and Inorganic Primers in Bolted Connections	B. R. Lower	Sep-91	Materials
SPR-1315	Corrosion and Alternate Deicers, Interim Report	R. L. McCrum	Oct-91	Materials
SPR-1316	Evaluation of Ice Detection and Highway Weather Information Services, Final Report	J. H. DeFoe	Mar-92	Systems, Maintenance & Operations
SPR-1317	Alleged Damage to Susan Shilander's House Due to Traffic-Induced Vibrations	E. Quiroga	Jan-92	Environmental
SPR-1318	The Lightweight Pavement Profile Instrument Development and Applications	J. R. Darlington	Jun-92	Systems, Maintenance & Operations
SPR-1319	Cantilever Sign Structure Inspection, Final Report	B. W. Ness, R. D. Till	Aug-92	Bridge & Special Structures Design
SPR-1320	Evaluation of Simulated Bridge Deck Slabs Using Uncoated, Galvanized, and Epoxy Coated Reinforcing Steel	R. L. McCrum	Feb-93	Bridge & Special Structures Design
SPR-1321	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
SPR-1322	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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SPR-1323	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
SPR-1324	Evaluation of Experimental Painting of A588 Steel Bridges	E. M. Phifer	Aug-93	Bridge & Special Structures Design
SPR-1325	Evaluating Low Dusting Abrasives on the Bridge Carrying Covert Road Over US-127	E. M. Phifer	May-93	Bridge & Special Structures Design
SPR-1326	Interior Vehicle Noise From Shoulder Rumble Strips	F. Harwood, R. Holcomb	Sep-93	Environmental
SPR-1327	Concrete Pavement Restoration, Final Report	D. E. Branch	Jan-95	Pavement Design & Pavement Performance
SPR-1328	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>
SPR-1330	The Relationship Between Torque, Tension, and Nut Rotation of Large Diameter Anchor Bolts	R. D. Till, N. A. Lefke	Oct-94	Materials
SPR-1331	Advance Warning Arrow Panel Evaluation	D. J. Rogers, V. C. Andrews, R. E. Nordlund	Feb-95	Systems, Maintenance & Operations
SPR-1332	Investigation of the Air Content of Plastic vs. Hardened Concrete	R. W. Muethel	Feb-95	Pavement Design & Pavement Performance
SPR-1333	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
SPR-1334	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
SPR-1335	Evaluation of Galvanized Pedestrian Bridges	D. C. Long, E. M. Phifer	May-95	Bridge & Special Structures Design
SPR-1336	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>
SPR-1338	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>
SPR-1340	Evaluation of the Urettek Method for Pavement Undersealing	W. H. Opland, V. T. Barnhart	Aug-95	Pavement Design & Pavement Performance
SPR-1341	Inspection and Performance Evaluation of Prefabricated Drainage System	V. T. Barnhart	Oct-98	Bridge & Special Structures Design
SPR-1342	Inspection and Repair of High-Mast Luminaires (HML)	M. C. Isola, R. L. McCrum	Aug-96	Systems, Maintenance & Operations

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SPR-1343	Second Year Performance of The European Concrete Pavement on Northbound I-75, Detroit, Michigan	D. L. Smiley	Jun-96	Pavement Design & Pavement Performance
SPR-1343B	Third Year Performance of European Concrete Pavement on Northbound I-75, Detroit, Michigan	MDOT	Mar-97	Pavement Design & Pavement Performance
SPR-1344	Effect of Elevated Temperature on Fracture Critical Steel Members	R. D. Till	Jul-96	Bridge & Special Structures Design
SPR-1345	Adoption of a Rapid Test for Determining Aggregate Durability in Portland Cement Concrete	U of M	Jun-96	Materials
SPR-1346	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
SPR-1347	Load Testing of Bridges	A. S. Nowak, V. K. Saraf	Oct-96	Bridge & Special Structures Design
SPR-1348	Investigation of Condition of Prestressed Concrete Bridges in Michigan	D. E. Needham, D. A. Juntunen	Jan-97	Bridge & Special Structures Design
SPR-1349	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
SPR-1350	Development of a Mobile System for Measuring Traffic Sign Retroreflectivity	R. E. Nordlund, D. C. Long	Aug-98	Systems, Maintenance & Operations
SPR-1351	Investigation of Precast Deck Panels Used in Spread Box Beam Bridges	R. D. Till, D. E. Needham	Apr-97	Bridge & Special Structures Design
SPR-1352	Performance Evaluation of Isotropic Bridge Decks (Ontario Design), Interim Report	D. E. Needham	May-97	Bridge & Special Structures Design
SPR-1353	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>			
SPR-1355	Glued-On Fiber Reinforced Plastic (FRP) Sheets for Repair and Rehabilitation	MDOT & U of M	Aug-97	Materials
SPR-1356	Bituminous Crack Filling Test Section on US-10 Near Evert	M. J. Eacker, A. R. Bennett	Apr-98	Pavement Design & Pavement Performance
SPR-1357	Comparison of Methods Used to Produce Hot-Dipped Galvanized W-Beam Guardrail	R. D. Till, C. Davis	Jan-98	Materials
SPR-1358	Study of Michigan's Link Plate and Pin Assemblies	D. A. Juntunen	Apr-98	Bridge & Special Structures Design
SPR-1359	Bituminous Pavement Resurfacing at Snowmobile Crossings First Year Review	T. D. Miller	Mar-98	Pavement Design & Pavement Performance
SPR-1360	Polymers in Bituminous Mixtures – Phase II	M. C. Hawley, L. T. Drzal, G. Baladi, Y. J. Lee	Aug-97	Materials
SPR-1361	Design Procedures for Concrete Anchors (Mechanical Expansion and Bonded Anchors)	D. Needham, D. A. Juntunen	Jun-98	Materials

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Report Number	Title	Author	Publication Date	Category
SPR-1362	Development of a Guide for Evaluation of Existing Bridges Part I	A. S. Nowak, S. Kim	May-98	Asset Management
SPR-1363	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
SPR-1364	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>			
SPR-1367	Monitoring Both Short & Long Term Mechanical Properties for Large Stone Mixtures	MSU	Oct-98	Materials
SPR-1368	Comparison of Standard and Deep Bridge Deck Overlay Performances	B. D. Beck	Feb-99	Bridge & Special Structures Design
SPR-1369	Bridge Engineering: Synthesis of Planning, Design, Construction, Maintenance, Materials and Research	U of M	Dec-98	Asset Management
SPR-1370	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>			
SPR-1372	Repair and Strengthening of Reinforced Concrete Beams Using CFRP Laminates	T. Gillespie	Apr-99	Bridge & Special Structures Design
SPR-1373	Prestressed Concrete Beam End Repair	D. Needham	Oct-99	Bridge & Special Structures Design
SPR-1374	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>			
SPR-1376	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>			
SPR-1378	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>			
SPR-1380	Prestressed Concrete Beam End Report	D. E. Needham	Jan-00	Bridge & Special Structures Design
SPR-1381	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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SPR-1382	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>			
SPR-1384	Electrochemical Chloride Extraction	S. Kahl	Feb-01	Materials
<i>SPR-1385</i>	<i>No Report</i>			
SPR-1386	Repair of Corrosion-Damaged Columns Using FRP Wraps	MSU	Dec-00	Bridge & Special Structures Design
SPR-1387	Whitetopping Project on M-46 Between Carsonville and Port Sanilac	M. Eacker	Oct-00	Pavement Design & Pavement Performance
SPR-1388	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
SPR-1389A	Development of the Procedure for Efficient Evaluation of Bridge Decks	U of M	Nov-00	Asset Management
SPR-1389B	Michigan Deck Evaluation Guide	U of M & MDOT	Nov-00	Asset Management
SPR-1390	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
SPR-1391	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
SPR-1392	Non Metallic Reinforcement of Concrete Bridge Decks	MSU	Jan-01	Bridge & Special Structures Design
SPR-1393	Verification of Girder Distribution Factors for Steel Girder Bridges	U of M	May-01	Bridge & Special Structures Design
SPR-1394	Evaluation of Minimum Surface Preparation Coatings for Bridge Painting	B. Beck	May-01	Bridge & Special Structures Design
SPR--1395	Evaluation of Alignment Tolerances for Dowel Bars and their Effects on Joint Performance	MSU	Jun-01	Pavement Design & Pavement Performance
SPR-1396	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
SPR-1397	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
SPR-1398A	Crash Testing of Michigan's Type B (W-Beam) Guardrail System	Univ. of Nebraska – Lincoln	Nov-99	Materials
SPR-1398B	Crash Testing of Michigan's Type B (W-Beam) Guardrail System – Phase II	Univ. of Nebraska – Lincoln	Dec-00	Materials
SPR-1399	Concrete Mix Design, Process Manual	G. Grove	Aug-98	Materials

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SPR-1400	Field Evaluation of Experimental Low VOC Bridge Paints	B. D. Beck	Jul-02	Bridge & Special Structures Design
SPR-1401	Investigation of Transverse Cracking on Michigan PCC Pavements over Open-Graded Drainage Courses	U of M	Nov-98	Pavement Design & Pavement Performance
SPR-1401-Appendices	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>
SPR-1403	Evaluation of Concrete Permeability by Ultrasonic Testing Techniques	WSU	Jan-01	Bridge & Special Structures Design
SPR-1404	Transverse Crack Propagation of JPCP as Related to PCC Toughness	U of M	Aug-01	Pavement Design & Pavement Performance
SPR-1405	Construction Project Scheduling at MDOT	MTU	Dec-99	Construction
SPR-1406	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>			
SPR-1408	A-588 Bridge Mounted Sign Failure Investigation	D. Juntunen	Jan-00	Bridge & Special Structures Design
SPR-1409	Synthesis and Review of Superpave Implementation	MTU	Mar-02	Pavement Design & Pavement Performance
SPR-1410	Development of Laboratory Performance Test Procedures and Trial Specifications for Hot Mix Asphalt, Final Report	MTU	Oct-04	Materials
SPR-1411	Development and Evaluation of the Lane Merge Traffic Control System at Construction Work Zones	WSU	Dec-01	Construction
SPR-1412 A	Investigation of Steel Box Girder Pier Caps on S05 of 63103	R. Till	Jun-02	Bridge & Special Structures Design
SPR-1412	Causes and Cures for Prestressed Concrete I-Beam End Deterioration	MTU & WSU	Aug-02	Pavement Design & Pavement Performance
SPR-1413	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>
SPR-1415	Evaluation of the Dynamics of Fracture Characteristics of Aggregate in PCC Pavement	S. Vitton, G. Dewey, G. Subhash	Dec-02	Materials
SPR-1416	Identify Causes for Under Performing Rubblized Concrete Pavement Projects; Volume I and Volume II	MSU	Aug-02	Pavement Design & Pavement Performance
SPR-1416-Appendices	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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SPR-1417	Three Year Evaluation of Whitetopping Project on M-46	M. J. Eacker	Feb-02	Pavement Design & Pavement Performance
SPR-1418	Agricultural By-Products for Anti-icing and Deicing Use in Michigan	S. Kahl	Dec-02	Materials
SPR-1419	Work Item Production Rates for MDOT Projects	MTU	Jun-02	Planning
SPR-1420	A Comparison of MDOT Schedules as a Result of Special Provision for Progress Schedule FUSP102G	MTU	Jun-02	Planning
SPR-1421	Detecting and Quantifying Segregation in Bituminous Pavements and Relating its Effect Condition; Final Report and Appendix E	MSU	Mar-02	Pavement Design & Pavement Performance
SPR-1421-Appendices	Detecting and Quantifying Segregation in Bituminous Pavements and Relating its Effect Condition; Final Report and Appendix E	MSU	Mar-02	Pavement Design & Pavement Performance
SPR-1422	Field Performance of Polymer Bridge Deck Overlays in Michigan	MTU	Jan-03	Bridge & Special Structures Design
SPR-1423	Concrete Surface Texture Study	R. Muethel, T. Miller	May-04	Pavement Design & Pavement Performance
SPR-1424	Criteria and Benefits of Penetrating Sealants for Concrete Bridge Deck	WSU	Dec-02	Bridge & Special Structures Design
SPR-1425	A Study of Materials-Related-Distress (MRD) in Michigan's PCC Pavements – Phase 2	MTU & MSU	Dec-02	Pavement Design & Pavement Performance
SPR-1425-Appendices	A Study of Materials-Related-Distress (MRD) in Michigan's PCC Pavements – Phase 2	MTU & MSU	Dec-02	Pavement Design & Pavement Performance
SPR-1426	Mechanistic Design Implementation Plan for Flexible Pavements and Overlays	MSU	Nov-97	Pavement Design & Pavement Performance
SPR-1427	Factors Affecting the Deterioration of Transverse Cracks in JRCP	MSU	Mar-95	Pavement Design & Pavement Performance
SPR-1428	Research Annual Report FY 00, 01, 02	T&R Section	Mar-03	Administration & Management
SPR-1429	Verification of Girder Distribution Factors for Continuous Steel Girder Bridges	U of M	May-03	Bridge & Special Structures Design
SPR-1430	Analytical Design Procedures and Load Rating for Isotropic Bridge Decks	U of M	May-03	Asset Management
SPR-1431	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>
SPR-1433A	Effect of Truck Loading on Bridges	U of M	Dec-94	Bridge & Special Structures Design
SPR-1433B	Truck Loads on Selected Bridges in the Detroit Area	U of M	Dec-94	Bridge & Special Structures Design

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SPR-1434	Analysis of Bystander Noise Generated by Vehicle/Road Surface Interaction	MTU	May-03	Environmental
SPR-1435	Sensors to Monitor Bond in Concrete Bridges Rehabilitated with FRP	MSU	Oct-03	Bridge & Special Structures Design
SPR-1436	Development of Alternative Pavement Distress Index Models	MSU	Nov-03	Pavement Design & Pavement Performance
SPR-1437	Investigative Causes and Develop Methods to Minimize Early-Age Deck Cracking on Michigan Bridge Decks	WSU	Dec-03	Bridge & Special Structures Design
SPR-1438	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>
SPR-1440	Determining the Causes of Top-Down Cracks in Bituminous Pavements	MSU	Aug-03	Pavement Design & Pavement Performance
SPR-1441	A Preliminary Mechanistic Evaluation of PCC Cross-Sections Using ISLAB2000 – A Parametric Study	MSU & MTU	Aug-04	Pavement Design & Pavement Performance
SPR-1442	The Evolution and Application of MDOT Aggregate Specifications	G. Grove	Sep-04	Materials
SPR-1443	Petrographic Evaluation of Cores from the Mosel Avenue Bridge	MTU	Mar-04	Bridge & Special Structures Design
SPR-1444	Preliminary Investigation of the Role of Bacteria in Concrete Degradation	MTU	Apr-04	Pavement Design & Pavement Performance
SPR-1445	Causes and Cures for Cracking of Concrete Barriers – MTU Study	MTU	Apr-04	Materials
SPR-1445-Appendix	Causes and Cures for Cracking of Concrete Barriers – MTU Study	MTU	Apr-04	Materials
SPR-1446	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>			
SPR-1448	Causes and Cures for Cracking of Concrete Barriers – WSU Study	WSU	Aug-04	Materials
SPR-1449	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
SPR-1450	Development of a Computer Program for Dynamic Back Calculation of Flexible Pavement Layer Moduli	MSU	Jun-04	Systems, Maintenance & Operations
SPR-1451	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
SPR-1452	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>
SPR-1454	Development of Steel Beam End Deterioration Guidelines	MTU	Jan-05	Bridge & Special Structures Design
SPR-1455	Inspection and Deterioration of Bridge Decks Constructed Using Stay-in-Place Metal Forms and Epoxy-Coated Reinforcement	LTU	Oct-04	Bridge & Special Structures Design
SPR-1456	Premature Deterioration in Michigan Jointed Concrete Pavements on Open Graded Drainage Courses Draft Report	U of M & MTU	Nov-97	Pavement Design & Pavement Performance
SPR-1456-Appendices	Premature Deterioration in Michigan Jointed Concrete Pavements on Open Graded Drainage Courses Draft Report	U of M & MTU	Nov-97	Pavement Design & Pavement Performance
SPR-1457	Uses of Recycled Concrete in Michigan	U of M	Nov-95	Pavement Design & Pavement Performance
SPR-1457A	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
SPR-1458	Research Annual Reports, FY00-01; FY02-03; FY04	S. Kulkarni, N. Crider	Dec-04	Administration & Management
SPR-1459 Vol I	Mineral Characterization and Cataloging of Quarried Aggregate Sources Used in Michigan Highway Construction	MTU	Jan-05	Materials
SPR-1459 Vol II	Mineral Characterization and Cataloging of Quarried Aggregate Sources Used in Michigan Highway Construction	MTU	Jan-05	Materials
SPR-1459-Appendix	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>
SPR-1462	European Concrete Pavement Tour	R. Till, R. Van Portfliet	Nov-92	Pavement Design & Pavement Performance
SPR-1463	Specifications for European Concrete Pavement	Demo Project	Aug-93	Pavement Design & Pavement Performance
SPR-1464	Report on the 1992 U.S. Tour of European Concrete Highways	AASHTO / FHWA	Jun-05	Pavement Design & Pavement Performance
SPR-1465	Unbonded Concrete Overlay Demonstration Project on I-75 in Ogemaw County – Construction Report	M. Eacker, A. Bennett	Jun-05	Pavement Design & Pavement Performance
SPR-1466	LRFD Load Calibration for State of Michigan Trunkline Bridges	WSU, CSI & MDOT	Aug-06	Bridge & Special Structures Design
SPR-1467	Field Test of Variable Speed Limits in Work Zones in Michigan	MSU	Sep-03	Systems, Maintenance & Operations
SPR-1468	Development of a Pavement Marking Management System	MSU	Dec-04	Systems, Maintenance & Operations

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SPR-1469	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>
SPR-1471	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
SPR-1472	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
SPR-1473	Analysis of the Benefits of Bulk Pre-Wetting Solid Salt with Several Different Liquids	MTU	Jan-06	Materials
SPR-1474	Investigation of Breakaway Light Standards	S. Kahl, R. Till	Apr-06	Transportation Safety
SPR-1475	Deer-Vehicle Collisions: Understanding of Accident Characteristics and Drivers Attitude Awareness and Involvement	MSU	Jan-06	Transportation Safety
SPR-1476	Environmental Factors Affecting the Rate of Deer Vehicle Crashes in Southern Michigan	MSU	Jan-06	Environmental
SPR-1477	Evaluation of Exhaust Gas Emissions and Worker Exposure from Asphalt-Rubber Binders in Hot Mix Asphalt Mixtures	Wildwood	May-94	Environmental
SPR-1478	Economic Benefits of the Michigan Department of Transportation's 2005-2009 Highway Program	EDR, U of M	Jan-05	Administration & Management
SPR-1478 Spotlight	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>			
SPR-1481	PCC Pavement Acceptance Criteria for New Construction when Built-In Curling Exists	U of M	Feb-08	Pavement Design & Pavement Performance
SPR-1482	Absorption Capacity of Coarse Aggregates for Portland Cement Concrete	J. F. Staton	Sep-06	Materials
<i>SPR-1483</i>	<i>No Report</i>			
SPR-1484	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>			
SPR-1487	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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SPR-1488	Analytical Investigation of the Effects of Aligned Dowel Bars Coated with Corrosion Protective Systems on Initial Dowel Concrete Bond Stresses	MSU	Feb-07	Materials
SPR-1489	Experimental Evaluation and Field Monitoring of Prestressed Box Beams for SCC Demonstration Bridge	MSU	Jul-07	Bridge & Special Structures Design
SPR-1490	Bridge Deck Corner Cracking on Skewed Structures	WSU	Sep-07	Bridge & Special Structures Design
SPR-1491	Chloride Content in Segments of the Zilwaukee Bridge	R. D. Till	May-07	Bridge & Special Structures Design
SPR-1492	Developing Guidelines for Use of Pedestrian Countdown Traffic Signals	MSU	Jan-07	Non-Motorized Planning & Development
SPR-1493	Graphical Analysis of Freeze-Thaw Test Results	R. W. Muethel	May-07	Pavement Design & Pavement Performance
SPR-1494	Graphical Analysis of Iowa Pore Index Test Results	R. W. Muethel	May-07	Pavement Design & Pavement Performance
SPR-1495	Effects of Deicing Salts on the Chloride Levels in Water and Soil Adjacent to Roadways	R. W. Muethel	Jul-07	Environmental
SPR-1496	Reconstructing the Michigan State Police Test Tracks to Enable Evaluation of Advanced Traffic and Pavement Engineering Concepts	MSU	Jul-07	Pavement Design & Pavement Performance
SPR-1497	Resilient Modulus at the Limits of Gradation and Varying Degrees of Saturation	MTU	Nov-07	Materials
SPR-1498	Performance of Michigan's Concrete Barriers	J. F. Staton, J. Knauff	Aug-07	Bridge & Special Structures Design
SPR-1498 Spotlight	In-House Research Improves Concrete Bridge Barriers			Bridge & Special Structures Design
SPR-1499	Corrosion Resistant Alloy Steel (MMFX) Reinforcing Bar in Bridge Decks	S. Kahl	Sep-07	Bridge & Special Structures Design
SPR-1499 Spotlight	Corrosion-Resistant Alloy Steel Extends Life of Bridges			Bridge & Special Structures Design
SPR-1500	Evaluation of the Dynamic Late Lane Merge System at Freeway Construction Work Zones	WSU	Sep-07	Systems, Maintenance & Operations
SPR-1500 Spotlight	New Dynamic Signage Makes Lane Merges Smoother and Safer			Systems, Maintenance & Operations
SPR-1501	Investigation of Early Cracking on Selected JPCP Projects	MDOT & U of M	Nov-07	Pavement Design & Pavement Performance
SPR-1502	Improved Shallow Depth Patches for Concrete Structures	MSU	Feb-08	Pavement Design & Pavement Performance
SPR-1503	Quantifying Coefficient of Thermal Expansion Values of Typical Hydraulic Cement Concrete Paving Mixtures	MSU	Jan-08	Materials
SPR-1504	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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SPR-1505	Development of a Simple Diagnosis Tool for Detecting Localized Roughness Features	MSU	Feb-09	Systems, Maintenance & Operations
SPR-1506	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
SPR-1506 Spotlight	Engineered Cementitious Composite May Replace Bridge Deck Joints			Bridge & Special Structures Design
SPR-1507	Evaluation of Prefabricated Composite Steel Box Girder Systems for Rapid Bridge Construction	MSU	Feb-08	Bridge & Special Structures Design
SPR-1508	Identification Of Causes And Development Of Strategies For Relieving Structural Distress In Bridge Abutments	MSU	Feb-08	Bridge & Special Structures Design
SPR-1509	Use of Unbonded CFCC for Transverse Post-Tensioning of Side-by-Side Box-Beam Bridges	LTU	Feb-08	Bridge & Special Structures Design
SPR-1509 Spotlight	Carbon Fiber Post-Tensioned Cables Reduce Bridge Deck Cracking, Extend Service Life			Bridge & Special Structures Design
SPR-1510	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
SPR-1511	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
SPR-1511 Spotlight	Calibrating National Bridge Standards for Michigan's Unique Truck Loading			Pavement Design & Pavement Performance
SPR-1512	Evaluation of Grout-Filled Mechanical Splices for Precast Concrete Construction	P. Jansson	May-08	Materials
SPR-1513	Evaluation of Economic Impacts of Michigan VII Program (Vehicle Infrastructure Integration)	MSU	Sep-07	Systems, Maintenance & Operations
SPR-1513 Spotlight	Making the Economic Case for IntelliDrive			Systems, Maintenance & Operations
SPR-1514	Combining Link Slab, Deck Sliding over Backwall, and Revising Bearings	WMU	Jul-08	Bridge & Special Structures Design
SPR-1515	Performance of Isotropic Bridge Decks	P. Jansson	Jun-08	Bridge & Special Structures Design
SPR-1516	Evaluation of the 1-37A Design Process for New and Rehabilitated JPCP and HMA Pavements	MSU	Oct-08	Pavement Design & Pavement Performance
SPR-1516 Spotlight	Implementing the Mechanistic Empirical Pavement Design Guide in Michigan			Pavement Design & Pavement Performance
SPR-1517	Analysis of Stress Distribution in Link Plates Used for Suspending Bridge Beams	P. Jansson	Sep-08	Bridge & Special Structures Design
SPR-1518	Evaluating the Economic Benefits to Michigan of Alternative Road-Bridge Investment Mixes	U of M	Mar-08	Bridge & Special Structures Design
SPR-1519	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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Report Number	Title	Author	Publication Date	Category
SPR-1520	Methodology of Homogeneous and Non-Homogeneous Markov Chains for Modeling Bridge Element Deterioration	WSU	Aug-08	Bridge & Special Structures Design
SPR-1521	Development of Simple Performance Tests Using Laboratory Test Procedures to Illustrate the Effects of Moisture Damage on Hot Mix Asphalt	MTU	Apr-06	Materials
SPR-1522	Development of Acceptance Criteria of Compacted Hot Mixture Asphalt Bulk Specific Gravity Based on Vacuum Sealed Specimens: Final Report	MTU	Oct-05	Materials
SPR-1523	Performance Evaluation of JRPC with Stabilized Open-Graded Drainage Course	U of M	Aug-09	Pavement Design & Pavement Performance
SPR-1524	Value Affect of Construction Incentive Payments on Pavement Performance	MSU	Aug-09	Contracting & Contract Administration
SPR-1525	Ultra-High Performance Concrete for Michigan Bridges, Material Performance – Phase I, Final Report	MTU	Nov-08	Bridge & Special Structures Design
SPR-1526	Estimate of Cliff Recession Rates for the Baraga Cliffs	MTU	Aug-08	Geotechnical & Foundation Design
SPR-1527	Condition Assessment and Methods of Abatement of Prestressed Concrete Box-Beam Deterioration – Phase II	WMU	Apr-09	Bridge & Special Structures Design
SPR-1528	Absorption Capacity of Coarse Aggregates for Portland Cement Concrete	J. F. Staton, J. D. Anderson	Feb-09	Materials
SPR-1529	Overload Truck Wheel Load Distribution on Bridge Decks	R. D. Till	Apr-09	Bridge & Special Structures Design
SPR-1530	Cement Kiln Dust Stabilized Test Section on I-96/I-75 in Wayne County – Construction Report	N. Bandara, M. Grazioli	May-09	Materials
SPR-1531	Pavement Subgrade MR Design Values for Michigan’s Seasonal Changes	MSU	Jul-09	Pavement Design & Pavement Performance
SPR-1532	Development of Specifications for Superpave Simple Performance Tests	MTU	May-09	Pavement Design & Pavement Performance
SPR-1533	Evaluation of Concrete Pavements with Materials-Related Distress	MTU	Mar-10	Pavement Design & Pavement Performance
SPR-1534	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
SPR-1535	Development of New Test Procedures for Measuring Fine and Coarse Aggregate Specific Gravities	MTU	Dec-09	Materials
SPR-1535 Spotlight	New Lab Tests Show Promise in Verifying Pavement Mix Designs			Materials
SPR-1536	A Sensor Network System for the Health Monitoring of the Parkview Bridge Deck	WMU	Jan-10	Bridge & Special Structures Design
SPR-1536 Spotlight	Michigan Gains Valuable Experience from Demonstration of Rapid Bridge Construction			Bridge & Special Structures Design
SPR-1537	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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SPR-1537 Spotlight	Fitting Traffic Data into Mechanistic-Empirical Pavement Design			Pavement Design & Pavement Performance
SPR-1538	Fifteen Year Performance Review of Michigan's European Concrete Pavement	D. L. Smiley	Feb-10	Pavement Design & Pavement Performance
SPR-1539	An Evaluation of Right-Turn-In/Right-Turn-Out Restrictions in Access Management	MSU	Sep-09	Planning
SPR-1540	Assessment of Pavement Acceptance Criteria and Quantifying its As-Constructed Material and Structural Properties	MSU	Mar-11	Pavement Design & Pavement Performance
SPR-1541	Skewed Highway Bridges	WSU	Jul-13	Bridge & Special Structures Design
SPR-1542	Improving Driver's Ability to Safely and Effectively Use Roundabouts: Educating the Public to Negotiate Roundabouts	WSU	Mar-11	Transportation Safety
SPR-1542 Spotlight	Roundabouts: How to Get Around a Safer Intersection			Transportation Safety
SPR-1543	Evaluation of Steady-Burn Warning Lights on Channelizing Drums in Work Zones	WSU	Dec-10	Systems, Maintenance & Operations
SPR-1544	Using Recycled Concrete in MDOT's Transportation Infrastructure – Manual of Practice	MTU	Aug-11	Pavement Design & Pavement Performance
SPR-1544 Spotlight	Using Recycled Concrete for Sustainable Roadways			Pavement Design & Pavement Performance
SPR-1544A	Efficient Use of Recycled Concrete in Transportation Infrastructure	MTU	Jan-11	Pavement Design & Pavement Performance
SPR-1545	Michigan Ohio University Transportation Center – Multiple Reports	Univ. of Detroit Mercy	Dec-10	Systems, Maintenance & Operations
SPR-1546	Effects of Debonded Strands on the Production and Performance of Prestressed Concrete Beams	MSU	Jan-11	Bridge & Special Structures Design
SPR-1546 Spotlight	Strand Debonding Helps Minimize Bridge Beam End Cracking			Bridge & Special Structures Design
SPR-1547	A Critical Evaluation of Bridge Scour for Michigan Specific Conditions	LTU & WSU	Feb-11	Bridge & Special Structures Design
SPR-1548	Backcalculation of Unbound Granular Layer Moduli	MSU	Mar-11	Pavement Design & Pavement Performance
SPR-1549	ECR Bridge Decks: Damage Detection & Assessment of Remaining Life for Various Overlay Repair Options (Parts I & II)	MSU	Jan-11	Bridge & Special Structures Design
SPR-1549 Spotlight 1	Moving Toward Electronic Testing for Invisible Bridge Deck Damage			Bridge & Special Structures Design
SPR-1549 Spotlight 2	Testing Epoxy-Coated Rebar Helps Refine Bridge Maintenance Strategies			Bridge & Special Structures Design
SPR-1550	Sustainable Recycled Materials for Concrete Pavements	Applied Pave.Tech	Mar-11	Materials

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SPR-1551	Extending the Life of Asphalt Pavements	Applied Research Assoc. Inc	May-11	Pavement Design & Pavement Performance
SPR-1551 Spotlight	Targeted Strategies to Extend the Life of Asphalt Pavements			Pavement Design & Pavement Performance
SPR-1552	Impact of Hydrated Cement Paste Quality and Entrained Air Void System on the Durability of Concrete	MTU	Jun-11	Pavement Design & Pavement Performance
SPR-1553	Carbon Footprint for Hot Mix Asphalt and Portland Cement Concrete Pavements	MTU	Jun-11	Pavement Design & Pavement Performance
SPR-1554	A Michigan Toolbox for Mitigating Traffic Congestion (Parts I & II)	TTI	Sep-11	Systems, Maintenance & Operations
SPR-1554 Spotlight	Reducing Traffic Congestion on a Budget			Systems, Maintenance & Operations
SPR-1555	Safety Analysis of 4-Lane to 3-Lane Conversions (Road Diets) in Michigan	MSU	Jan-12	Transportation Safety
SPR-1555 Spotlight	Safety and Operational Analysis of Four-Lane to Three-Lane Conversions (Road Diets) in Michigan			Transportation Safety
SPR-1556	Laboratory Evaluation of Warm Mix Asphalt (WMA)	MTU	Sep-11	Materials
SPR-1557	Feasibility of Digital Imaging to Characterize Earth Materials	U of M	Jun-12	Systems, Maintenance & Operations
SPR-1557 Spotlight	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>
SPR-1559	Strategies for Improving Traveler Information	Cambridge Systematics	Jan-11	Systems, Maintenance & Operations
SPR-1560	Stainless and Stainless-Clad Reinforcement for Highway Bridge Use	S. Kahl	Dec-11	Bridge & Special Structures Design
SPR-1561	Improving Driver Safety with Behavioral Countermeasures	CMU	Sep-11	Transportation Safety
SPR-1561 Spotlight	Changing the Behavior to Improve Driver Safety			Transportation Safety
SPR-1562	Recommendations for Meeting the Transportation Needs of Michigan's Aging Population	U of M	Sep-11	Transportation Safety
SPR-1562 Spotlight	Enhancing the Safety and Mobility of Michigan's Older Residents			Transportation Safety
SPR-1563	High Skew Link Slab Bridge System with Deck Sliding over Backwall or Backwall Sliding over Abutment	WMU	Sep-11	Bridge & Special Structures Design
SPR-1563 Spotlight	Improving the Design of High-Skew Jointless Bridges			Bridge & Special Structures Design

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SPR-1564	Development and Validation of a Sensor-Based Health Monitoring Model for Parkview Bridge Deck	WSU	Jan-12	Bridge & Special Structures Design
SPR-1565	Evaluating Performance and Making Best Use of Passing Relief Lanes	Opus International	Dec-11	Roadway Design
SPR-1565 Spotlight	Assessing the Impact of Passing Relief Lanes			Roadway Design
SPR-1566	Evaluating the Performance and Effectiveness of Roundabouts	Opus International	Dec-11	Roadway Design
SPR-1566 Spotlight	Assessing the Performance of Michigan Roundabouts			Roadway Design
SPR-1567	Investigate Causes and Develop Methods for Preventing Falling Concrete from Bridges	LTU	Sep-12	Bridge & Special Structures Design
SPR-1568	Usage and Impact of the Vehicle Infrastructure Integration (VII) Program	Mixon/Hill of MI, Inc.	Mar-12	Systems, Maintenance & Operations
SPR-1569	Re-Examination of the 1994 and Subsequent sewer and Culvert Installations of Various Pipe Types, Sizes and Depths	URS	Feb-14	Geotechnical & Foundation Design
SPR-1570	Evaluating the Appropriate Level of Service for Michigan Rest Areas and Welcome Centers Considering Safety and Economic Factors	WSU	Apr-12	Tourism
SPR-1570 Spotlight	Valuing Michigan's Rest Areas: A Cost-Benefit Approach			Tourism
SPR-1571	Identification of Causes and Solution Strategies for Deck Cracking in Jointless Bridges	MSU	Jul-12	Bridge & Special Structures Design
SPR-1572	Sharing the Road – Optimizing Pedestrian and Bicycle Safety and Vehicle Mobility	T.Y. Lin International, WMU, Corradino Grp	Apr-12	Non-Motorized Planning & Development
SPR-1572 Spotlight	Comprehensive Guidance for Pedestrian and Bicycle Safety Improvements			Non-Motorized Planning & Development
SPR-1573	Slippery Road Detection and Evaluation	UMTRI – R. Robinson	May-12	Pavement Design & Pavement Performance
SPR-1573 Spotlight	Slippery Road Detection is a Promising Benefit of Connected Vehicles			Pavement Design & Pavement Performance
SPR-1574	Improved Performance of JPCP Overlays	U of M	Jul-13	Pavement Design & Pavement Performance
SPR-1575	Impact of Non-Freeway Rumble Strips – Phase 1	WSU	Jun-12	Transportation Safety
SPR-1575 Spotlight	Evaluating the Benefits of Centerline Rumble Strips on Rural Highways			Transportation Safety
SPR-1576	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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SPR-1578	Timing Issues for Traffic Signals Interconnected with Highway-Railroad Grade Crossings	WSU	Feb-13	Systems, Maintenance & Operations
SPR-1578 Spotlight	Improving Safety Through Traffic Signal Coordination Near Highway-Railroad Grade Crossings			Systems, Maintenance & Operations
SPR-1579	Cost Effectiveness of the MDOT Preventive Maintenance Program	Applied Pavement Technologies	Apr-13	Asset Management
SPR-1580	Evaluating the Financial Cost and Impact on Long Term Pavement Performance of Expediting Michigan's Road Construction Work	MSU	Feb-14	Systems, Maintenance & Operations
SPR-1581	Best Practices for Emergency Rerouting	Kimley Horn	Sep-12	Transportation Safety
SPR-1582	Examining the Disadvantaged Business Enterprise (DBE) Program	U of M	Sep-12	Contracting & Contract Administration
SPR-1582 Spotlight	Improving Communications for MDOT's DBE Program			Contracting & Contract Administration
SPR-1583	Implementation of Quick Clearance in Michigan	Cambridge Systematics	Sep-12	Transportation Safety
SPR-1583 Spotlight	Spreading the Word About the Quick Clearance Law			Transportation Safety
SPR-1584	Transportation Reliability and Trip Satisfaction	WSU	Oct-12	Systems, Maintenance & Operations
SPR-1585	Evaluating Pedestrian Safety Improvements	WMU	Dec-12	Non-Motorized Planning & Development
SPR-1586	Implementation of Sustainable and Green Design and Construction Practices for Bridges	MSU, Univ. of New Haven	Dec-12	Bridge & Special Structures Design
SPR-1587A	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
SPR-1587B	Development and Validation of Deterioration Models for Concrete Bridge Decks – Phase 2: Mechanics-based Degradation Models	MSU	Jun-13	Bridge & Special Structures Design
SPR-1588	VII Data Use Analysis and Processing (DUAP) Final Project Report (Phase II)	UMTRI	Jul-11	Systems, Maintenance & Operations
SPR-1589	Review and Revision of Overload Permit Classification	Michael Baker, Jr. Inc.	Feb-13	Commerical Vehicle Enforcement
SPR-1589 Spotlight	Updating Overload Permit Analysis to Better Serve MDOT and Local Agencies			Commerical Vehicle Enforcement
SPR-1590	Assessment of ODOT Culvert Load Rating Spreadsheets for use in Michigan	MTU	Jan-13	Geotechnical & Foundation Design
SPR-1591	Alternative Materials for Sustainable Transportation	MTU	Aug-12	Materials
SPR-1592	Recommendations for Meeting the Mobility Needs of Older Adults in Rural Michigan	UMTRI	Dec-12	Transportation Safety

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

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SPR-1602	Improving Bridges with Prefabricated Precast Concrete Systems	WMU	Dec-13	Bridge & Special Structures Design
SPR-1602 Appendix	Improving Bridges with Prefabricated Precast Concrete Systems	WMU	Dec-13	Bridge & Special Structures Design
SPR-1602 Spotlight	Accelerating Bridge Construction to Minimize Traffic Disruption			Bridge & Special Structures Design
SPR-1603	Development of Performance Measures for Non-Motorized Dynamics	WMU	Dec-13	Non-Motorized Planning & Development
SPR-1604	Remanufacturing, Repurposing, and Recycling of Post-Vehicle-Application Lithium-Ion Batteries	GVSU	Jun-14	Environmental
SPR-1605	Twenty Year Performance Review of Michigan's European Concrete Pavement	MDOT	Oct-13	Pavement Design & Pavement Performance
SPR-1606A	Assessment of Aggregate Sources in Michigan for High Speed Railroad Ballast	MTU	Jan-14	Materials
SPR-1606B	Highway-Railroad Grade Crossing Surface Material Performance	MTU	Apr-14	Multi-Modal
SPR-1606C	Rural Freight Rail and Multimodal Transportation Improvements – the Upper Peninsula of Michigan	MTU	Jul-14	Multi-Modal
SPR-1607	Monitoring Highway Assets with Remote Technology	Dye Management	Jul-14	Systems, Maintenance & Operations
SPR-1607 Spotlight	Monitoring Highway Assets Using Remote Sensing Technology			Systems, Maintenance & Operations
SPR-1608	Synthesis of Methods for Procurement and Developing Transit Vehicle Specifications	URS	Jun-14	Multi-Modal
SPR-1609A	Evaluating the Impacts of Speed Limit Policy Alternatives	WSU	Jul-14	Transportation Safety
SPR-1609A Spotlight	Evaluating the Impacts of Proposed Speed Limit Increases in Michigan			Transportation Safety
SPR-1609B	Evaluating Outcomes of Raising Speed Limits on High Speed Non-Freeways	WSU	Apr-15	Transportation Safety
SPR-1610	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>
SPR-1612	Study of High Tension Cable Barrier on Michigan Roadways	WSU	Oct-14	Transportation Safety
SPR-1612 Spotlight	Cable Median Barriers: A Cost-Effective Means To Save Lives			Transportation Safety
SPR-1613	Measuring Michigan Local and Statewide Transit Levels of Service	Cambridge	Sep-14	Multi-Modal

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

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

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

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

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

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

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

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

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SPR-1704 Implementation Spotlight	Dynamic Speed Feedback Signs Effectively Improve Driver Behavior			Transportation Safety
SPR-1705	Evaluating New Technologies for Roads Program Initiatives in Safety and Efficiency (ENTERPRISE) - Phase II	Athey Creek	Mar-22	Intelligent Transportation Systems & Signal
SPR-1705-Spotlight	Transportation agencies pool ideas and resources for technology-enabled solutions			Intelligent Transportation Systems & Signal
SPR-1706	US-23 Performance, Safety, and Perception Assessment	MSU	Jan-22	Transportation Safety
SPR-1706-Spotlight	Evaluating safety and traffic improvements along Michigan's first flex route			Transportation Safety
SPR-1707	Evaluation of 0.7 Inch Diameter Carbon Fiber Reinforced Polymer Pretensioning Strands in Prestressed Beams	LTU	Jun-22	Bridges & Structures
SPR-1708	Synthesis of National Best Practices on Pedestrian and Bicycle Design, Guidance, and Technology Innovations	MSU	Jan-22	Transportation Safety
SPR-1708-Spotlight	Updating best practices to keep pedestrians and bicyclists safe			Transportation Safety
SPR-1709	Quantifying Effectiveness and Impacts of Digital Message Signs on Traffic Flow	WMU	Apr-22	Intelligent Transportation Systems & Signal
SPR-1709 Spotlight	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>
SPR-1711	Innovative Contracting Risk Management Best Practices	RS&H	Mar-22	Contracting & Contract Administration
SPR-1711-Spotlight	Risk management tools help MDOT deliver projects on time and on budget			Contracting & Contract Administration
SPR-1712	Infrastructure Protection and Rehabilitation Response to High Lake Levels	Arcadis of Michigan, LLC	May-22	Environmental & Water Resources
SPR-1712-Spotlight	Tools to protect coastal roadways from high water			Environmental & Water Resources
SPR-1713	Integration of Unmanned Aerial Systems Data Collection into Day-to-Day Usage for Transportation Infrastructure	MTU	Jun-22	Mobility & Traffic Incidents
SPR-1713-Spotlight	Integrating drones into MDOT's day-to-day traffic and asset management			Mobility & Traffic Incidents
SPR-1714	Evaluating the Impacts of the 2017 Legislative Mandated Speed Limit Increases	MSU	Jan-23	Transportation Safety

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<i>SPR-1715</i>	<i>Effects of Concrete Cure Time on Epoxy Overlay and Sealant Performance</i>	WMU		Bridges & Structures
SPR-1716	Assessing System Performance of the Michigan Trunkline: Measures and Analytical Procedures for Planning and Operations	MSU	Jan-23	Travel Demand Forecasting
SPR-1716-Spotlight	Measuring Michigan's Highway Network Performance is Critical for Planning			Travel Demand Forecasting
SPR-1717	Competitive Bidding in Construction Contracts	WMU	Dec-22	Contract Administration
SPR-1718	Analysis and Deployment of an Unmanned Traffic Management System in Michigan	Airspace Link, Inc	Aug-23	Aviation
SPR-1719	Developing a Consistent Data Driven Methodology to Multimodal, Performance Based, and Context Sensitive Design	MSU	Dec-22	Rest Areas, Utilities & Landscaping
SPR-1719-Spotlight	New tool helps MDOT customize roadway designs for all users			Rest Areas, Utilities & Landscaping
SPR-1720	Quantify the Impact of Super Single (Wide-Base) Tires on Pavement Performance in Michigan	MTU	Jan-23	Pavements & Materials
SPR-1720-Spotlight	Understanding the impacts of wide base tires on Michigan's pavements			Pavements & Materials
SPR-1721	Safety Enhancements at Short-Storage-Space Railroad Crossings	TX A&M Transportation Institute	Mar-23	Freight Rail
SPR-1721-Spotlight	Enhancing safety at short-storage railroad crossings			Freight Rail
SPR-1722	Evaluation of MDOT's Long-Life Pilot Projects	MSU	Apr-23	Pavements & Materials
SPR-1722-Spotlight	Evaluating Pavements Designed for Longer Life			Pavements & Materials
SPR-1723	Testing Protocol, Data Storage and Recalibration for Pavement-ME Design	MSU	Oct-23	Pavements & Materials
SPR-1723-Spotlight	Refining data and tools to design cost-effective, sustainable pavement			Pavements & Materials
SPR-1724	Right of Way Mapping Conversion to GIS	MSU	Aug-23	Real Estate & Permits
SPR-1724-Spotlight	Modernizing right of way maps with geographic information system technology			Real Estate & Permits
SPR-1725	Evaluating the Performance and Safety Effectiveness of Roundabouts - An Update	MSU	Jun-23	Transportation Safety
SPR-1725-Spotlight	Maximizing the Safety, Economic and Environmental Benefits of Michigan Roundabouts			Transportation Safety
SPR-1726	Eastern Massasauga (Sistrurus Catenatus) Road Ecology and Population Dynamics in Michigan	MSU	Jul-24	Environment and Water Resources

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SPR-1726-Spotlight	Eastern massasauga rattlesnake's use of roadside space in southern Michigan		Sep-24	Environment and Water Resources
SPR-1727	Determining State and Federal Transportation Responsibilities to Residents on Islands	MSU	Jun-23	Local Transit
SPR-1727-Spotlight	Evaluating Michigan's ferry services, funding and policies to support island access		Sep-23	Local Transit
SPR-1728	Effective Bridge Deck Weather Warning Technologies	MSU	Apr-24	Intelligent Transportation Systems & Signals
SPR-1728-Spotlight	Alerting drivers to unsafe winter conditions on Michigan bridges			Intelligent Transportation Systems & Signals
<i>SPR-1729</i>	<i>Leveraging Crowd-sourced Data in Planning, Design, Analysis, and Evaluation of Pedestrian and Bicycle Traffic</i>	<i>UM</i>		<i>Non-Motorized Planning & Development</i>
SPR-1730	Repair of Bridge Deck Fascias	WSU	Sep-23	Bridges and Structures
SPR-1730-Spotlight	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>
SPR-1732	Enhanced Bridge Cost Estimating	WSU	Mar-24	Bridges and Structures
SPR-1732-Spotlight	Improving Cost Estimates for Bridge Repairs and Replacement			Bridges and Structures
SPR-1733	Establish Policies and Procedures for use of Subgrade Stabilization in Michigan	LTU	Mar-24	Pavements and Materials
SPR-1734	Effective Pedestrian/Non-Motorized Crossing Enhancements Along Higher Speed Corridors	WMU	Oct-23	Transportation Safety
SPR-1734-Spotlight	Making high-speed corridors safer for pedestrians and cyclists			Transportation Safety
SPR-1735	Construction Digital Delivery Technology Scan	CRAFT	Jul-24	Surveys and Automated Design
SPR-1735-Spotlight	Enhancing MDOT's digital vision to support construction processes		Dec-24	Surveys and Automated Design
SPR-1736	Corridor and Systemwide Application of Performance Based Practical Design	WSP	Jan-24	Project Development
SPR-1736-Spotlight	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>
SPR-1738	Utilizing Video Analytics with Connected Vehicles for Improved Safety	Kimley Horn	May-24	Intelligent Transportation Systems

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SPR-1738-Spotlight	Improving Road Safety with Video Analytics Technology			Intelligent Transportation Systems
SPR-1739	MDOT Fleet Electrification Strategies	Hatch	Mar-25	Fleet/Facilities Management & Operations
SPR-1740	Electronic Water Level Sensors for Monitoring Scour Critical Structures	UM	Feb-25	Bridges and Structures
SPR-1740-Spotlight	Water-Level Sensors Help Prioritize Inspections of Scour-CriticalBridges			Bridges and Structures
SPR-1741	Leveraging Crowd-sourced Data in Planning, Design, Analysis, and Evaluation of Pedestrian and Bicycle Traffic	UC Denver	Oct-24	Non-Motorized Planning & Development
SPR-1741-Spotlight	Using crowdsourced data to estimate nonmotorized traffic volumes			Non-Motorized Planning & Development
SPR-1742	Multimodal Aircraft Charging Station Depoloyment	C&S Engineering	Oct-24	Aviation
SPR-1742-Spotlight	Developing infrastructure at airports to charge electric aircraft and vehicles			Aviation
SPR-1743	Improving Cost Estimation and Budget Planning with New Michigan Highway Construction Cost Index	WMU	Mar-25	Project Development
SPR-1743-Spotlight	New cost index enhances construction estimates and budgeting			Project Development
<i>SPR-1744</i>	<i>Examination of Lighting Practices at Crosswalks</i>	<i>WMU</i>		<i>Transportation Safety</i>
<i>SPR-1745</i>	<i>Capacity Prediction of Repaired and Unrepaired Bridge Beams with Deteriorated Ends</i>	<i>WMU</i>		<i>Bridges and Structures</i>
<i>SPR-1746</i>	<i>Improving MDOT's Movable Bridge Reliability and Operations</i>	<i>HDR</i>		
<i>SPR-1747</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>SPR-1748</i>	<i>Efficacy of Speed Warning Technologies</i>	<i>MSU</i>		
<i>SPR-1749</i>	<i>Research and Development of a 3-Item Transportation Security Index Mobility Measurement Test - UTC</i>	<i>UM</i>		
<i>SPR-1750</i>	<i>Michigan Hydrologic Calculation Procedures</i>	<i>MTU</i>		
<i>SPR-1751</i>	<i>Identify Best Locations for New Flex-Route Projects Throughout the State of Michigan</i>	<i>MSU</i>		
<i>SPR-1752</i>	<i>Optimizing Work Zone Conditions to Maximize Safety and Mobility</i>	<i>MSU</i>		
<i>SPR-1753</i>	<i>Unmanned Aircraft Systems Communication Mesh Test Deployment</i>	<i>WSP</i>		

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SPR-1754	<i>Bonding Vs. Pay-Go</i>	<i>Texas A&M</i>		
SPR-1755	<i>Winter Severity Index with Winter Maintenance Expenses and Material Usage</i>	<i>MSU</i>		
SPR-1756	<i>Digital Collaboration using Industry Foundation Classes (IFC) and Building Information Model (BIM) Technology</i>	<i>MSU</i>		
SPR-1757	<i>Marketing and Education Budget for Implementation of New Transit Technology</i>	<i>CRAFT</i>		