

TABLE OF CONTENTS

CONTACT LIST	I
TABLE OF CONTENTS	II
EXECUTIVE SUMMARY	VII
Overview of the Study.....	vii
Context of the 2015 Rail Plan Update.....	viii
The Vision for Minnesota’s Multimodal Transportation System	ix
Minnesota’s Existing and Future Rail System.....	x
Stakeholder and Public Involvement.....	xvii
Program Summary and Action Plan.....	xvii
Program Implementation and Funding.....	xix
Conclusions	xxi
1.0 THE ROLE OF RAIL IN STATEWIDE TRANSPORTATION	1-1
Background and Purpose of Study	1-1
The Vision for Minnesota’s Multimodal Transportation System	1-2
Minnesota’s Rail System Goals	1-4
Institutional Governance Structure of the State Rail Programs.....	1-7
Minnesota’s Authority for Grants, Loans and Public-Private Partnerships.....	1-11
Integration with Previous Planning Efforts	1-13
2.0 THE STATE’S EXISTING RAIL SYSTEM.....	2-18
Minnesota’s Existing Rail System	2-18
Trends and Forecasts.....	2-19
Rail Service Needs and Opportunities	2-44
3.0 PROPOSED PASSENGER RAIL IMPROVEMENTS AND INVESTMENTS.....	3-1
2010 Plan Corridor Prioritization	3-1
2015 Minnesota State Rail Plan Corridor Prioritization.....	3-2
Phase I Corridors in Advanced Planning	3-3
Phase I Corridors.....	3-6
Phase II Corridors.....	3-10
Station Improvements.....	3-10
Improved Intermodal Connections to Other Passenger Modes	3-11
State of Good Repair Projects	3-11
Rolling Stock Improvements	3-11
Opportunities for Improved Coordination or Integration with Freight	3-11
Cost of Project Implementation.....	3-12
4.0 PROPOSED FREIGHT RAIL IMPROVEMENTS AND INVESTMENTS	4-1

Capacity Needs	4-2
Crossing Safety Improvements.....	4-5
Weight, Speed and Track Restrictions.....	4-6
Other Major Capacity Improvements	4-7
Bridges.....	4-9
Intermodal Services	4-10
Positive Train Control	4-11
Line Relocation.....	4-12
Railroads and Hazardous Materials.....	4-14
5.0 THE STATE’S RAIL SERVICE AND INVESTMENT PROGRAM.....	5-1
Vision.....	5-1
Program Coordination.....	5-4
Program Summary.....	5-5
Project Costs	5-7
Passenger Element	5-8
Freight Element	5-12
Financing	5-14
Public and Private Economic Benefits	5-15
Rail Studies and Reports	5-15
Passenger and Freight Rail Capital Program	5-16
6.0 COORDINATION AND REVIEW.....	6-1
Public Participation	6-1
Coordination with Neighboring States and Canada.....	6-3
Stakeholder Engagement	6-4
Public and Stakeholder Feedback	6-5
Planning Coordination and Integration.....	6-21
APPENDIX A: SUMMARY OF EACH DOCUMENT REVIEWED	6-1
APPENDIX B: COMMODITY FLOW ANALYSIS.....	6-1
APPENDIX C: IMPROVEMENT COST EVALUATION.....	6-1
APPENDIX D: PUBLIC INVOLVEMENT	6-1
APPENDIX E: INVENTORY OF COMMENTS RECEIVED.....	6-1
APPENDIX F: LETTERS AND RESOLUTIONS	6-1
APPENDIX G: ENVIRONMENTAL JUSTICE	6-1

LIST OF TABLES

Table 1.1: Funding Summary.....	1-13
Table 1.2: Common Rail Issues Summary.....	1-16
Table 2.1: Freight Railroads Operating in Minnesota.....	Error! Bookmark not defined.
Table 2.2: Types of Rail in Minnesota.....	2-11
Table 2.3: Major Freight Terminals.....	2-13
Table 2.4: Rail Freight Volumes by Minnesota Railroad (2012-2040, in Thousands).....	2-38
Table 2.5: 2012 and 2040 Annual Passenger Demand and 2040 Rail Demand From/To the Twin Cities (Phase I and Phase II Corridors).....	2-40
Table 2.6: Minnesota TIGER Grants Awarded.....	2-46
Table 2.7: Public Private Partnerships Infrastructure Approaches.....	2-48
Table 2.8: Types of Public Private Partnership Approaches in Surface Transportation Projects.....	2-49
Table 3.1: 2040 Passenger Service Needs – Twin Cities to Albert Lea ^a	3-8
Table 3.2: 2040 Passenger Service Needs – Twin Cities to Eau Claire, Wisconsin ^a	3-8
Table 3.3: 2040 Passenger Service Needs – Twin Cities to Fargo/Moorhead ^a	3-9
Table 3.4: 2040 Passenger Service Needs – Twin Cities to Mankato ^a	3-9
Table 3.5: 2040 Passenger Service Needs – Twin Cities to St. Cloud ^a	3-10
Table 4.1: Summary of Freight Investments for 2030.....	4-1
Table 4.2: Twin Cities Core Freight Totals.....	4-4
Table 4.3: BNSF and CP Crossing Safety Improvements.....	4-5
Table 5.1: Phase I - Passenger Project Performance Measures – Benefits <i>in Millions</i>	5-9
Table 6.1: Open House Locations and Participation.....	6-2
Table 6.2: Stakeholder Group Engagement.....	6-5
Table 6.3: Letters and Resolutions.....	6-8
Table 6.4: Freight Survey Mode Importance Results.....	6-12
Table 6.5: MetroQuest Rail Investment Needs.....	6-16

LIST OF FIGURES

Figure 2.1: Class I Route System	2-2
Figure 2.2: Regional and Short Line Railroads	2-7
Figure 2.3: Amtrak Empire Builder On-Time Performance.....	2-12
Figure 2.4: Amtrak Empire Builder Primary Causes of Delay by Fiscal Year (2004-2014)	2-13
Figure 2.5: Minnesota Population by County, 2010	2-21
Figure 2.6: Minnesota Population Change by County, 2010-2040.....	2-21
Figure 2.7: Mean per Capita Income by County in Minnesota	2-22
Figure 2.8: Percent Difference in Housing Prices Compared to US Average (By State, 2004-2014)	2-23
Figure 2.9: Cost of Living Index for Urban Areas – Percent Difference from U.S. Average Cost, 2010.....	2-23
Figure 2.10: Job Growth in Minnesota, in Thousands, by Major Occupational Group, 2012–2022	2-24
Figure 2.11: Gross State Product, Minnesota and Neighboring States (Millions of 2013 \$USD).....	2-25
Figure 2.12: Industry Sectors as Percent of Minnesota GSP with Freight-related Industries in Bold Text.....	2-26
Figure 2.13: Minnesota Corn Production and Ethanol Plant Locations, 2012.....	2-28
Figure 2.14: Taconite/Iron Ore Operations in Northeast Minnesota.....	2-29
Figure 2.15: Originated and Terminated Carloads of Crude Oil, 2005 to 2013.....	2-31
Figure 2.16: Total Rail Tonnage by Equipment Type 2012 (left) and 2040 (right)	2-32
Figure 2.17: Total Rail Units by Equipment Type 2012 (left) and 2040 (right)	2-33
Figure 2.18: Rail Flow Volumes, 2012	2-34
Figure 2.19: Rail Flow Volumes, 2040	2-35
Figure 2.20: Freight Tonnage Growth by Direction 2007, 2012 and 2040	2-36
Figure 2.21: Freight Value Growth by Direction 2007, 2012 and 2040	2-36
Figure 2.22: Top 10 Rail Trading Partners by Weight 2012-2040.....	2-37
Figure 2.23: Rail Volume by Miles Travelled and Direction 2012, Weight (Left) and Value (Right)	2-38
Figure 2.24: Historical Cost of Diesel Fuel.....	2-41
Figure 3.1: Passenger Rail Corridors.....	3-2
Figure 5.1: Passenger Rail Project Decision Process.....	5-4
Figure 6.1: MetroQuest Rail Investment Needs Map	6-14
Figure 6.2: MetroQuest Rail Investment Needs Twin Cities Region Inset Map.....	6-14