

# State Rail Planning Best Practices

November 2009



AMERICAN ASSOCIATION OF  
STATE HIGHWAY AND  
TRANSPORTATION OFFICIALS

**AASHTO**  
THE VOICE OF TRANSPORTATION

# AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

## 2009–2010 Executive Committee

President: Larry “Butch” Brown, Mississippi  
Vice President: Susan Martinovich, Nevada  
Secretary/Treasurer: Carlos Bracerias, Utah

### Regional Representatives

Region I: Joseph Marie, Connecticut, One-Year Term  
Gabe Klein, District of Columbia, Two-Year Term

Region II: Dan Flowers, Arkansas, One-Year Term  
Mike Hancock, Kentucky, Two-Year Term

Region III: Nancy J. Richardson, Iowa, One-Year Term  
Thomas K. Sorel, Minnesota, Two-Year Term

Region IV: Paula Hammond, Washington, One-Year Term  
Amadeo Saenz, Jr., Texas, Two-Year Term

Immediate Past President: Allen Biehler, P.E., Pennsylvania  
Executive Director: John C. Horsley, Washington, DC

# AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

## Standing Committee on Rail Transportation (SCORT)

Chair: Secretary Gene Conti,  
North Carolina Department of Transportation  
Vice Chair: Bill Bronte, Caltrans  
Secretary: Leo Penne, AASHTO

---

### State Members and Alternates

<i>Alabama</i>	J. Brian Atkins, Brenda Jones, Criag Thomas	<i>Hawaii</i>	Alvin Takeshita
<i>Alaska</i>	Robert Laurie	<i>Idaho</i>	Ron Kerr
<i>Arizona</i>	Mike Normand, Shannon Scutari	<i>Illinois</i>	George Weber, Natasha L. Holmes
<i>Arkansas</i>	Scott Bennett, Cliff McKinney	<i>Indiana</i>	Keith Bucklew, Mike Riley
<i>California</i>	William D. Bronte, Tom Messer, Richard Nordahl	<i>Iowa</i>	Tamara Nicholson
<i>Colorado</i>	Jennifer Finch, Tamela Lang	<i>Kansas</i>	John Maddox
<i>Connecticut</i>	Eugene J. Colonese, Jeffrey A. Parker, James Redeker	<i>Kentucky</i>	Lynn Soporowski
<i>Delaware</i>	David W. Campbell, Roberta Geier, Gregory Oliver, Ken Potts	<i>Louisiana</i>	Colonel Tom Atkison, Jr., Dean J. Goodell
<i>D.C.</i>	Rick Rybeck, Steve Strauss	<i>Maine</i>	Susan Moreau, Nathan Moulton
<i>Florida</i>	Robert E. "Ed" Lee, Nazih K. Haddad, J. Fred Wise	<i>Maryland</i>	Caitlin Hughes, Rayman Rick Johnson
<i>Georgia</i>	Erik Steavens, Alan Ware	<i>Massachusetts</i>	Tim Doherty
		<i>Michigan</i>	Tim Hoeffner, Larry B. Karnes, Melvin G. Williams
		<i>Minnesota</i>	William D. Gardner, Daniel Krom, Mike A. Schadauer
		<i>Mississippi</i>	Robby Burt, Juan Flores, Edward "Butch" Swales Jr., P.E.

## State Members and Alternates *(Continued)*

<i>Missouri</i>	Rodney Massman, Brian Weller	<i>Pennsylvania</i>	Calvin Cassidy, Gary M. Deberry, Toby L. Fauver, Eric Madden
<i>Montana</i>	Zia Kazimi		
<i>Nebraska</i>	Abe Anshasi, P.E., Beverly Vonasek	<i>Puerto Rico</i>	Vacant
<i>Nevada</i>	Eric Glick	<i>Rhode Island</i>	Stephen A. Devine
<i>New Hampshire</i>	Lou Barker, Christopher “Kit” Morgan	<i>South Carolina</i>	Doug Frate, Roy Tolson
<i>New Jersey</i>	Mike Goldblatt	<i>South Dakota</i>	Bruce Lindholm
<i>New Mexico</i>	Henry Gonzales, William T. Harris, Frank Sharpless	<i>Tennessee</i>	LaRosa Collier, Eddie Stott
<i>New York</i>	Donald Hannon, Charles A. Poltenson, Ann Purdue	<i>Texas</i>	Jennifer Moczygemba, P.E., Mark Werner
<i>North Carolina</i>	Patrick B. Simmons, Jim Westmoreland, P.E., Paul Worley, CPM	<i>Utah</i>	Dan Kuhn
<i>North Dakota</i>	Robert Johnston	<i>Vermont</i>	Richard Hosking, Charles Miller
<i>Ohio</i>	Matt Dietrich, Leonard Evans, P.E., Louis A. Jannazo	<i>Virginia</i>	Kevin B. Page
<i>Oklahoma</i>	Joe R. Kyle Jr.	<i>Washington</i>	Scott Witt
<i>Oregon</i>	Kelly Taylor	<i>West Virginia</i>	Cindy Butler, Patrick J. Donovan
		<i>Wisconsin</i>	Ronald E. Adams, Beth F. Nachreiner
		<i>Wyoming</i>	Talbot Hauffe, MPA, Dan Kline
<b>AASHTO</b>		<b>Associate Members—International</b>	
<i>Washington, D.C.</i>	Leo Penne, Shayne Gill, Christopher Smith	<i>Ontario</i>	James Perttula
		<i>Saskatchewan</i>	Michael Makowsky
<b>U.S. DOT Member</b>			
<i>FRA</i>	Paul Nissenbaum		

## Reader's Note and Acknowledgements

This guidebook is the first of its kind—a concise resource to empower states with the information and strategy they need to develop effective and Federally-compliant state rail plans. The purpose of this guidebook is not to provide *all* the answers or to dictate formulaic approaches—but rather to serve as a resource to set the planning process on the correct trajectory to meet individual state needs. As future issues arise, AASHTO may provide updates to this guidebook and supporting materials, including a comprehensive list of existing state rail plans Internet links, on its website:

[http://freight.transportation.org/rail\\_index.html](http://freight.transportation.org/rail_index.html)

The American Association of State Highway and Transportation Officials (AASHTO) acknowledges the leadership of Standing Committee on Rail Transportation (SCORT) in sponsoring the development of this publication. AASHTO also recognizes the contributions and guidance of members of SCORT and input from the U.S. Department of Transportation, and railroad partners. This guidebook was created for the states by consultant Cambridge Systematics, Inc. under the direction of Donald B. Ludlow, AICP. We hope this guidebook will serve as a timely resource of maximum value to state rail planning efforts.

# Table of Contents

<b>Introduction</b> . . . . .	<b>ix</b>
<b>Section 1—Background</b> . . . . .	<b>1</b>
Basic Components of a State Rail Plan . . . . .	1
National Perspectives: The State of State Rail Planning . . . . .	1
Rail Plan Consumers . . . . .	3
<b>Section 2—Rail Self Assessment</b> . . . . .	<b>5</b>
What Resources Do You Need to Complete the Plan? . . . . .	5
Rail Self Assessment . . . . .	6
Agency Support and Structure . . . . .	8
<b>Section 3—Coordination and Outreach</b> . . . . .	<b>9</b>
Coordination . . . . .	9
Outreach . . . . .	14
Public Meetings . . . . .	17
Outreach Conclusions and Next Steps . . . . .	17
<b>Section 4—Vision, Goals, and Objectives</b> . . . . .	<b>19</b>
Establishing a Rail Vision . . . . .	19
Goals, Objectives, Strategies, and Actions . . . . .	21
<b>Section 5—Rail System Inventory</b> . . . . .	<b>25</b>
System Description . . . . .	25
System Use . . . . .	34
<b>Section 6—Rail Issues and Opportunities</b> . . . . .	<b>47</b>
Rail’s Transportation, Economic, and Environmental Impacts . . . . .	47
Safety and Security . . . . .	50
Other Issues . . . . .	51
<b>Section 7—Needs Identification</b> . . . . .	<b>53</b>
Freight Needs . . . . .	53
Needs Assessment Approach . . . . .	54
<b>Section 8—Project Evaluation Approach</b> . . . . .	<b>59</b>
Definition of Public and Private Benefits . . . . .	60
Methodology Evolution . . . . .	60
Evaluation Techniques . . . . .	61
<b>Section 9—Funding for Implementation</b> . . . . .	<b>69</b>
A New Orientation . . . . .	69
Identifying Current Funding . . . . .	69

Identify Potential Funding Sources . . . . .	70
High-Speed Funding Plan . . . . .	72
Provide Examples . . . . .	72
Overcoming Other Hurdles . . . . .	73
<b>Appendix A: PRIIA State Rail Plan Contents Correspondence Table . . . . .</b>	<b>75</b>
<b>Appendix B: Glossary of Terms . . . . .</b>	<b>77</b>
<b>Appendix C: Sample Railroad Outreach Survey . . . . .</b>	<b>81</b>

## List of Tables

Table 2-1.	In-House Versus Consultant Capabilities Spectrum . . . . .	7
Table 3-1.	Illustrative Profiles of State Rail Planning Committees <i>Recent and Ongoing</i> . . . . .	13
Table 3-2.	Common Railroad Corporate Interface <i>for State Rail Planning Activities</i> . . . . .	15
Table 4-1.	Florida Vision, Goals, Objectives, and Strategies . . . . .	22
Table 5-1.	Potential Commodity Flow Hierarchy . . . . .	36
Table 5-2.	Freight Commodity Flow Data . . . . .	37
Table 5-3.	Passenger Rail System Utilization Data . . . . .	41
Table 5-4.	Summary of Proposed Intercity Standards and Metrics <i>Adapted from March 2009 FRA/Amtrak Provisional Draft</i> . . . . .	44
Table 5-5.	Florida Sample Travel Times by Mode . . . . .	46
Table 7-1.	Eligible Capital Assistance Activities . . . . .	53
Table 7-2.	Florida Procedure for Identifying Freight Rail Needs . . . . .	55
Table 7-3.	Florida Freight Railroad Needs by Category . . . . .	56
Table 8-1.	Project List Requirements and Consideration. . . . .	59
Table 8-2.	Potential Project Evaluation Measures . . . . .	62–63
Table 8-3.	Treatment of Considerations . . . . .	66
Table 9-1.	Virginia Rail Program Revenue Outlook (2008) . . . . .	71
Table 9-2.	National Freight Rail Financing Examples . . . . .	72–73
Table A-1.	PRIIA State Rail Plan Contents Correspondence Table . . . . .	75

# List of Figures

Figure 1-1. National State Rail Planning Status Publication  
Year of Existing and In-Progress Plans . . . . . 3

Figure 2-1. What Resources Does a State Need to  
Complete an Implementable Plan? . . . . . 5

Figure 2-2. State Rail Plan Authority and Approval Process . . . . . 8

Figure 3-1. Potential Coordination Linkages . . . . . 9

Figure 3-2. Prototype State Rail Plan Institutional Organization . . . . . 10

Figure 3-3. State Rail Planning in Context . . . . . 11

Figure 4-1. Pacific Surfliner Route Objectives . . . . . 23

Figure 5-1. Florida Rail System Ownership. . . . . 27

Figure 5-2. California Passenger Rail Operations. . . . . 29

Figure 5-3. Current (2005) and Future (2035) Level of Service  
Without Capacity Investment . . . . . 30

Figure 5-4. Profile of Alexander Railroad (North Carolina) . . . . . 31

Figure 5-5. Wisconsin Rail Facilities . . . . . 32

Figure 5-6. North Carolina Abandoned Rail Lines (2006) . . . . . 33

Figure 5-7. Strategic Rail Corridor Network (STRACNET) . . . . . 34

Figure 5-8. Florida Freight Rail Tonnage by Direction (2004) . . . . . 38

Figure 5-9. Washington State Rail Tonnage Forecast . . . . . 39

Figure 5-10. Oregon Freight Rail Density (2001) . . . . . 40

Figure 5-11. Amtrak Virginia Ridership – Virginia Routes  
(*Commonwealth Passengers Only = 464,797*) . . . . . 42

Figure 5-12. Annual Ridership for Amtrak California Service . . . . . 43

Figure 8-1. PRIIA Definition of Public and Private Benefits. . . . . 60

Figure 8-2. Virginia Project Profile (with Benefits) . . . . . 65

Figure 9-1. State Rail Funding and Financing Options and Examples . . . . . 70

## Introduction

Interest in rail planning is reaching new heights as state departments of transportation (DOTs) across the country rush to qualify for new Federal grants authorized through the Passenger Rail Investment and Improvement Act (PRIIA). This new wave of state rail planning activity builds on the recent momentum and leadership of several states that have developed compelling freight and passenger rail planning programs and investments. This guidebook, prepared under the direction of the American Association of State Highway and Transportation Officials' (AASHTO) Standing Committee on Rail Transportation (SCORT), serves as flexible guidance to states launching state rail plans for the first time or for veteran programs looking to renew older plans with an eye to the future—and new funding.

**The overarching goal of this guidebook is to help states produce PRIIA-compliant state rail plans customized to the unique circumstances of each state.**

This guidebook provides a framework for developing comprehensive state rail plans, but it does not substitute for any forthcoming regulatory guidance from the U.S. Department of Transportation. PRIIA stipulates that the U.S. Secretary of Transportation “prescribe procedures for states to submit state rail plans for review under this title, including standardized format and data requirements.” Official Federal regulations are expected from the Federal Railroad Administration (FRA) by October 2010 to meet the two-year limit contained in the law. Because this guidebook and more than a dozen new or updated state rail plans will be completed before the release of Federal regulations, it is the Standing Committee on Rail Transportation’s hope that FRA will incorporate lessons learned from the states into the published regulations. An open dialogue between the states, FRA, and the railroads will aid in accomplishing this objective.

