

## APPENDIX A

### TYPES OF TRANSIT ASSETS

<b>Asset Category</b>	<b>Asset Type</b>
Buildings	Stations Bus Shelters Maintenance Facilities Administrative Facilities Electrical Facilities
Structures	Bridges Culverts Embankment Walls Viaducts Signal Bridges Electrical Support Structures
Marine Structures	Bulkheads Piers Dry-docks
Tunnels	Bored (Ground, Underwater) Cut and Cover Underwater Immersed Tube Underwater Floating
Communication Systems	Radios -VHF -UHF Control Centers Locational Systems Micro-Wave Distribution Systems Copper Wire Distribution Cellular Phones- Digital Security Systems -CCTV -Call Boxes
Electrical	Signals Power Distribution Fire Life Safety/Alarm Fare Collection Rail Signals
Traction Power	Catenary Third Rail
Track	Subway -ballast -concrete (direct fixation) -floating slab -tie blocks in concrete At-Grade -ballast -embedded -grade crossings Bridges or Elevated

<b>Asset Category</b>	<b>Asset Type</b>
Track (cont.)	-open deck -ballast -concrete (direct fixation)
Vehicles (Rubber Tired)	Revenue -buses -vans -taxis -trolley buses Non- Revenue -trucks -passenger cars -tractor trailers
Rail Rolling Stock	Locomotive -diesel -electric -alternative fuel -dual mode Self-Propelled -electric -diesel -dual mode Coaches Work Equipment Track Geometric Car
Vessels	Vehicle/Driver Passenger
Miscellaneous	Fencing Pavement Parking Lots

## APPENDIX B

### ASSET CATEGORIES AND ASSOCIATED SYSTEMS

<b>Asset</b>	<b>System</b>
Buildings	Exterior Envelope Conveying Interior Superstructure Substructure HVAC Plumbing Equipment Electrical Distribution Communication
Structures	Electrical Wingwalls Abutments Approaches Piers Deck Elements Superstructure
Marine Structures	Backfill Fender Structural
Tunnels	Electrical Signalization Interior Substructure Ventilation Shaft/Tower Drainage Roadway/Pavement HVAC/Mechanical Fire Suppression Equipment Corrosion Protection
Communication Systems	Radio Base Stations Satellite Receivers Hazard Detectors (Rail) Cable
Electrical	Security System Traffic Signals Rail Signals -switch machines -wayside signals -equipment housings -grade crossing signals -cable -cut sections -control centers Power Distribution

<b>Asset</b>	<b>System</b>
	<ul style="list-style-type: none"> <li>-transformers</li> <li>-control cable</li> <li>-duct banks</li> <li>-motor controllers</li> <li>-emergency power</li> <li>-substations</li> <li>-switching stations</li> <li>-transmission wire</li> <li>-generators</li> <li>-breakers</li> </ul>
Traction Power	Catenary System <ul style="list-style-type: none"> <li>-catenary wire</li> <li>-catenary structures</li> <li>-catenary bridges</li> <li>-insulators</li> <li>-phase breaks</li> <li>-high voltage transmission wire</li> </ul> Third Rail <ul style="list-style-type: none"> <li>-rail</li> <li>-insulators</li> <li>-protection board</li> <li>-cable</li> <li>-breaker switches</li> </ul>
Track	Running Rail Guard Rail Rail Fastening System Crossties Tie Blocks Ballast (Stone or Concrete) Turnouts Crossovers Diamonds Tie Clips (Bridges and Elevated) Tie Spacer Bars Walkways Hand Rails Insulated Joints Grade Crossing Material (Rubber, Concrete or Wood) Joint Bars Rail Braces
Vehicles (Rubber Tired)	Propulsion Unit (Engines/Transmissions) Interior Exterior HVAC Electrical Communication (Radio, Phone, AVL) Wheelchair Lifts/Hoists

Rail Rolling Stock	Propulsion Unit Passenger Cabin Mechanical and Electromechanical Equipment Electrical Communications
Vessels	Structure Machinery Electrical Piping Fresh Water
Miscellaneous	Fencing -bollards -wall -barrier -structure -gate -guard rail -nosing -railing Pavement and Parking Lots -curb -emergency turnaround -material -markings -roadway -sidewalk

# APPENDIX C

## REFERENCE DOCUMENT LOG

<b>No.</b>	<b>Document Title</b>	<b>Author</b>	<b>Date</b>	<b>Purpose</b>	<b>Contents</b>
1	Public Transportation Facilities and Equipment Management System	PennDOT	May-94	Request for Acceptance of Existing System	Explanation of PennDOT's Existing Systems and Demonstration of How Each Fulfills the Interim Final Rule
2	1993 Summary- Public Transportation Systems in Washington State	WSDOT	Jul-94	Facility Rating Criteria (In-House Washington DOT System)	Capital Facilities Condition Assessment and Prioritization
3	PTMS Vision	MichDOT	1994	Examples From Computer Screen of New PTMS	Definitions, Goals, and Condition Ratings of PTMS Done by Cambridge Technology
4	Facilities and Vehicle Survey and PTMS Mailing List	CaDOT	Jul-94	Instruction to Transit Operators	Advisory Contacts, Definitions, Condition Ratings, and Transit Operators Survey Form
5	Reporting Forms- PTMS	Tx DOT	Jul-94	Reporting Purposes	Definitions, Codes, and Descriptions of Items Survey Form Rating
6	PTMS Work Plan	NYSDOT	-	Develop and Implement the PTMS	Objectives, Work Elements, Organization and Schedule of the Overall PTMS
7	Draft Work Plan- PTMS	FDOT	Jul-94	Florida PTMS	Work Plan, Implementation Schedule, Base Inventory Structure, Standards and Measures
8	Pennsylvania Transportation Resource and Information Network	PennDOT/ FTA	Apr-94	Information Package About the Pennsylvania Transportation Resource and Information Network	Information About the System With a Bibliography
9	Pennsylvania Rural Transportation Assistance Program	PA RTAP	2/92-5/94	Sixth Biennial State Programs Meeting Washington, D.C.	Brief Report of Pennsylvania Transportation Resource and Information Network's Activities
10	Agency Information	TxDOT	-	Forms for an Application	Agency Information, Vehicle Data, Equipment Data, Transit Facilities, Texas Counties and County Codes and Condition Code Application Forms
11	Final Proposal of MBTA Assets to be Included in the PTMS	Mass EOTC	Jul-94	Asset List	Asset List Generated for PTMS Development in Massachusetts

<b>No.</b>	<b>Document Title</b>	<b>Author</b>	<b>Date</b>	<b>Purpose</b>	<b>Contents</b>
12	TIP Selection Criteria- Appendix C	DVRPC	Jul-94	Project Ranking and Selection Process	Transportation Improvement Program - Program Ranking and Selection From Modes
13	Policy Framework for 1993 ISTEA/ TIP Process and Criteria	PSRC	Apr-93	Process and Criteria	General Categories for Project Applications, Functional Project Groups- Technical and Policy Evaluation Criteria and Combined Regional/Countywide Process
14	Washington State Ferries	WaDOT	1991/1993	Two-Year Operations Report	System Map, Washington State Ferries Today, Engineering, Operations, Finance and Planning for the Future
15	Draft- General Guidance on the PTMS	USDOT/FTA	1993	Tools to Help Implement the PTMS Requirement	Guidance on the PTMS, Rail Modernization Study, and Bus Support Facilities: Needs and Conditions
16	Transit Management and Replacement Capital Planning	National Research Council	1988	Transportation Research Record 1165	Methodology for Projecting Rail Transit Rehabilitation and Replacement Capital Financing Needs
17	A Regional Approach to Rail Transit Training for the New York Metropolitan Area	USDOT	Jun-91	Recommendations	Case Studies of Training, Evaluation, and Innovations in Regional Rail Agencies With Shared Needs and Recommendations
18	General Guidance on the PTMS- Draft	USDOT/FTA	Jul-94	Tools to Help Implement the PTMS Requirement	Guidance on the PTMS, Rail Modernization Study, and Bus Support Facilities: Conditions and Needs
19	Rail Modernization Study	USDOT	Apr-87	Final Report	Multi-Year Assessment of the Rail Transit and Commuter Rail Systems
20	FTA Memo	USDOT/FHA	May-94	Guidance on Management and Monitoring Systems Interim Final Rule	Clarification and Guidance on the General Provisions on All of the Systems
21	A Guide to Strategic Planning for Transit Properties	USDOT	Dec-88	Final Report	How Strategic Planning Works With Cases and How to Make Recommendations

<b>No.</b>	<b>Document Title</b>	<b>Author</b>	<b>Date</b>	<b>Purpose</b>	<b>Contents</b>
22	Asset Management in the Transit Industry	USDOT/ UMTA	Mar-91	Benefits of Asset Management	Funding Inventory and Analysis, Capital Costs, Historical Analysis, Financial Leverage, Utilization and Management and Best Professional Practice
23	Manual for Railway Engineering	American Railway Engineering Association	Apr-94	Chapter 12- Rail Transit	Standards for the Transit System
24	Federal Register- Management and Monitoring Systems; Interim Final Rule	USDOT/ FTA	Dec-93	Interim Final Rule	Includes the Implementing Regulations for Management and Traffic Monitoring Systems
25	Bus Support Facilities: Conditions and Needs	USDOT	Jan-93	Assessment of Transit Needs	Analyzes Current Facility Conditions, Estimates Capital Costs for Facilities, and Links Estimates to Transit Capital Needs
26	Design/Build: A New Approach	USDOT/FTA	-	Turnkey, Demonstration, Program, Implementation, and Strategy	Industry Outreach, Other Significant Events, Technical Assistance, Monitoring and Evaluation
27	Guidelines for Bridge Management Systems	AASHTO	1993	Minimum Requirements for an Evaluation	Describe Scope, Present Genesis and Objectives, Describe Essential Features, Explain Alternative Approaches, Implement BMS and Infrastructure Management System
28	Mass Transit Management: A Handbook for Small Cities	USDOT	Feb-88	Part 1: Goals, Support and Finance	Setting Goals and Objectives, Transit Finance and the Transit Management Program
29	Mass Transit Management: A Handbook for Small Cities	USDOT	Feb-88	Part 2: Management and Control	Problems of Transit Management, Management By Objectives, and Issues That May Arise With Methods of Gathering Information
30	Mass Transit Management: A Handbook for Small Cities	USDOT	Feb-88	Part 3: Operations	Various Functions of Operating Functions of Personnel, Maintenance, Equipment Selection, Routing and Scheduling, and Communications and Control
31	Centre Area Transportation Authority Service Schedule for CATA's HC Vans	CATA	Jan-94	Preventive Maintenance Procedures	Guidelines to Follow for Service on Vans



<b>No.</b>	<b>Document Title</b>	<b>Author</b>	<b>Date</b>	<b>Purpose</b>	<b>Contents</b>
32	LACMTA FY 1993-94 Multi-Year Call For Projects Information and Training Seminar	LACMTA	Sep-93	Information and Training Seminar	Regional Transportation Improvement Program, Fund Source Information Sheets, Memorandum of Understanding, and Scope of Work
33	LACMTA 1994 Legislative Goals	LACMTA	1994	Legislative Goals	Guide for Legislative and Administrative Actions at the Federal Level
34	Multi-Year Call for Projects	LACTC	Jan-93	Fiscal Years 1993-94 Through 1996-97	Application Forms and Instructions for Different Projects
35	Modernization of the Nation's Rail Transit Systems: A Status Report	USDOT/FTA	Aug-92	FTA Policy Paper	Update on the Progress the Major Urban Transit Authorities Have Made in Rail Modernization Since 1984
36	Transit Management and Replacement Capital Planning	National Research Council	1988	Transportation Research Record 1165	Current Practices and Problems in Transit Replacement and Capital Planning, and Transit Management and Planning Issues
37	Flexible Funding Opportunities for Transit FY '94	USDOT/FTA	1994	Transportation Improvements	Explains Flexible Programs and Summarizes the Multimodal Planning Process
38	Transit System Security Program Guide	USDOT	Jan-94	Security Program Plan	Contents, Organization, Management, Implementation and Evaluation of Security Plan
39	Guideline Specifications for Passive Lifts, Active Lifts, Wheelchair Ramps and Securement Devices	USDOT	Sep-92	Specifications for Passive Lifts	Technical Requirements for Each Part of Object Testing, Certification, and Inspection With a List of Figures
40	Advanced Public Transportation Systems	USDOT/FTA	Apr-92	A Bibliography With Abstracts, 1985-1991	Bibliography of References From the UMTRIS
41	Advanced Public Transportation Systems: The State of the Art	USDOT/FTA	Apr-92	Update '92	Documents One of the Components of FTA's APTS Program

<b>No.</b>	<b>Document Title</b>	<b>Author</b>	<b>Date</b>	<b>Purpose</b>	<b>Contents</b>
42	Transit Planning and Research Programs	USDOT	Apr-94	Fiscal Year 1993 Project Directory	Descriptions of Transit Planning and Research Projects in 1993 - Meant to Inform the Public
43	Transit Capital Investment To Reduce Operating Deficits- Alternative Bus Replacement Strategies- Report 15	National Research Council	Jan-88	National Cooperative Transit Research and Development Program	Cost Control on Bus Replacement and Rehabilitation Strategies and the Adequacy of Maintenance Funds and Performance Measure
44	National Transit Summaries and Trends	USDOT	May-94	From the 1992 National Transit Database	Highlights Aggregated Financial and Operational Characteristics and Trends - PTMS
45	Transit Profiles of the 30 Largest Agencies	USDOT/FTA	Dec-93	For the 1992 Section 15 Report Year	Profiles Consisting of General and Summary Reports, as Well as Modal, Performance and Trend Indicators for the 1992 Report Year
46	Data Tables	USDOT/FTA	Dec-91	For the 1990 Section 15 Report Year	Data Tables for Individual Transit System Statistics
47	Data Tables	USDOT/FTA	Dec-93	For the 1992 Section 15 Report Year	Data Tables for Individual Transit System Statistics
48	Transit Profiles - Agencies in Urbanized Areas Exceeding 200,000 Population	USDOT/FTA	Dec-93	For the 1992 Section 15 Report Year	Profiles Consisting of General and Summary Reports, as Well as Modal, Performance and Trend Indicators for the 1992 Report Year
49	Transit Profiles - Agencies in Urbanized Areas With a Population Less Than 200,000	USDOT/FTA	Dec-93	For the 1992 Section 15 Report Year	Profiles Consisting of General and Summary Reports, as Well as Modal, Performance and Trend Indicators for the 1992 Report Year
50	NCHRP Report 363	National Research Council	1994	Role of Highway Maintenance in Integrated Management Systems	Outlines a Framework for Integrating Maintenance Management with Other Highway and Administrative Management Functions
51	1993 Grant Assistance Programs	USDOT/FHA	Feb-94	Statistical Summaries	Principal Source of Federal Financial Aid To Urban and Non-Urban Areas for Mass Transportation
52	National Transit Geographic Information System	USDOT/FTA	Jun-94	Brochure From FTA	What the Geographic Information System Consists of and is About

<b>No.</b>	<b>Document Title</b>	<b>Author</b>	<b>Date</b>	<b>Purpose</b>	<b>Contents</b>
53	Safety Management Information Statistics (SAMIS)	USDOT/FTA	Feb-93	1991 Annual Report	Compilation and Analysis of Mass Transit Accident and Casualty Statistics Reported by Transit Systems
54	Estimation of Operating and Maintenance Costs for Transit Systems	USDOT/FTA	Dec-92	Final Report	Guidance Regarding the Development and Application of Operating and Maintenance Cost Models
55	Innovative Technology to Improve Transit Maintenance Efficiency	USDOT/FTA	Jan-94	Final Report	Analysis of Innovative Maintenance Technologies Not Commonly Used in Public Transit Today
56	Conducting Pre-Award and Post-Delivery Audits for Bus Procurements	USDOT/FTA	Nov-93	Review Requirements	Pre-Award and Post-Delivery Review Requirements and Certification Requirements
57	Conducting Pre-Award and Post-Delivery Audits for Rail Vehicle Procurements	USDOT/FTA	May-94	Review Requirements	Pre-Award and Post-Delivery Review Requirements and Certification Requirements
58	Background - For BMS	Optima, Inc./Cambridge Systematics	-	Background of PONTIS with Objectives	Comprehensive System and Distinguishing Features of Bridge Maintenance and Improvement
59	Federal Register - ADA	USDOT	Jul-94	Transportation for Individuals With Disabilities	Specific Guidelines When Designing for People With Disabilities for Transit Systems
60	Urban Mass Transportation Project Management Guidelines for Grantees	USDOT/UMTA	Jul-88	Project Management Guidance	Updates the General Project Management Procedures Applicable to UMTA Grantees
61	Transit in the Nation's Capital: What Lies Ahead	USDOT/UMTA	Feb-86	A Study of Projected Transit Service, Costs and Financial Impacts on the Region Through the Year 2000	Regional Consensus on the Costs and Revenues in the Washington Region
62	FTA Leadership 1993- ISTE A and Beyond	USDOT/FTA	1993	Implement the Act's Goals	Lays Out the Progress Made To Implement the Goals of ISTE A
63	Recommended Fire Safety Practices for Rail Transit Materials Selection	USDOT	Aug-84	Fire Safety	Recommendations for Testing Flammability and Smoke Emission of Materials in Rapid and Light Transit Vehicles

<b>No.</b>	<b>Document Title</b>	<b>Author</b>	<b>Date</b>	<b>Purpose</b>	<b>Contents</b>
64	Manual on Contracting for Vehicle Maintenance Services	USDOT	Oct-92	Final Report	Guidelines for Contracting, Bidding, Negotiations, Drug Testing and Proposals
65	Public Transportation in the United States: Performance and Condition	USDOT/UMTA	Feb-91	Report to Congress	Updates Performance and Needs Information on PTMS in the U.S. by Role, Transit Performance and Costs of Maintenance
66	Light Rail Transit Capital Cost Study	USDOT/UMTA	Apr-91	UMTA Technical Assistance and Safety Program	Actual Construction and Related Development Costs for the Most Recently Constructed Light Rail Transit Systems in the U.S.
67	Section 9 Formula Grant Application Instructions	USDOT/UMTA	Sep-87	Instructions	Guidelines for the Preparation of Grant Applications
68	Bridge Management Systems	USDOT/FHA	Oct-89	Demonstration Project Number 71	Relevant Engineering and Economic Issues and Presents an Overview of Methodologies and Concepts in Bridge Management
69	Intermodal Technical Assistance Activities for Transportation Planners	USDOT/ Office of the Secretary of Transportation	Oct-93	Technical Assistance	Identifies Intermodal Technical Assistance Activities Originating Within the U.S. Department of Transportation
70	Innovative Funding for Intercity Modes	USDOT	Jul-87	A Casebook of State, Local, and Private Approaches	New Programs and Solutions For Maintaining Intercity Transportation Services, Public/Private Partnerships, and Non- Federal Funding Sources for Intercity Modes
71	Bus Fleet Management Principles and Techniques	USDOT	Nov-87	Final Report	Covers Several Fundamental Techniques and Principles of Bus Fleet Management With Examples From Case Studies
72	Recommended Fire Safety Practices for Rail Transit Materials Selection	USDOT	Oct-92	Fire Safety	Recommendations for Testing Flammability and Smoke Emmission of Materials in Rapid and Light Transit Vehicles

# APPENDIX D

## BASELINE STANDARDS

<u>Number</u>	<u>Asset</u>	<u>Sponsor</u>	<u>Subject</u>	<u>Document</u>	<u>Comments</u>
1	General	USDOT	Emergency Guidelines	UMTA- MA-06-01520-85-1	Recommended Emergency Preparedness Guidelines for Rail Transit Systems
2	General	USDOT	Emergency Guidelines	UMTA- MA-06-0186-898-1	Recommended Emergency Preparedness Guidelines for Elderly and Disabled Rail Transit Passengers
3	General	USDOT	Emergency Guidelines	UMTA- MA-06-0196-91-1	Recommended Emergency Preparedness Guidelines for Urban, Rural and Specialized Transit Systems
4	General	NFPA	Fire Protection	NFPA 130- Fixed Guideway Transit System	National Fire Protection Code for Transit Systems
5	General	USDOT	Fire Safety	Federal Register Notice Volume 58, Number 201	Recommended Fire Safety Practices for Transit Bus and Van Material Selection
6	General	USDOT	Fire Safety	Recommended Fire Safety Practices for Rail Transit Materials Selection	Recommended Fire Safety Practices for Rail Transit Materials Selection
7	General	APTA	Terminology	Glossary of Reliability, Availability and Maintainability Terminology for Rail Rapid Transit	
8	General	APTA	Transit Equipment	Guidelines for Rail Rapid Transit Equipment Reliability, Availability and Maintainability Assessment	
9	General	APTA	Transit Equipment	Guidelines for Rail Rapid Transit Equipment Reliability, Availability and Maintainability Specification	
10	General	USDOT	Security	Transit System Security Program Guide	Security Program Planning Guide
11	General	National Research Council	Capital Planning	Transit Management and Replacement Capital Planning	Transit Management and Replacement Capital Planning

<b><u>Number</u></b>	<b><u>Asset</u></b>	<b><u>Sponsor</u></b>	<b><u>Subject</u></b>	<b><u>Document</u></b>	<b><u>Comments</u></b>
12	General	USDOT	ADA	Federal Register Number 49, Parts 27, 37 and 38	
13	Buildings	USDOT	ADA	Federal Register- ADA	Guidelines for Designing Transit Systems for People With Disabilities
14	Buildings	USDOT	Bus Facilities	Bus Support Facilities: Conditions and Needs	Assessment of Current Conditions and Capital Costs
15	Buildings	APTA	Facilities	Guidelines for the Design of Rapid Transit Facilities	
16	Structures (Transit)	AREA	Structures	AREA- Manual for Railway Engineering Chapter 12	Part 4- Bridge and Structural Considerations (In Development)
17	Structures (Transit)	APTA	Elevated Tracks	Continuous Welded Rail on Aerial Structures- Examples of Transit Practice	
18	Commuter Rail	AREA	Buildings/ Support Facilities	AREA- Manual for Railway Engineering Chapter 6	Specifications and General Design Criteria for Railway Buildings
19	Commuter Rail	AREA	Yards and Terminals	AREA- Manual for Railway Engineering Chapter 14	Concerned With Problems of Location, Design, Construction and Operation of Yards
20	Commuter Rail	AREA	Wood Structures	AREA- Manual for Railway Engineering Chapter 7	Design and Material Specifications for Timber Structures
21	Commuter Rail	AREA	Concrete Structures	AREA- Manual for Railway Engineering Chapter 8	Design and Material Specifications for Concrete Structures
22	Commuter Rail	AREA	Steel Structures	AREA- Manual for Railway Engineering Chapter 15	Design and Material Specifications for Steel Structures

<b><u>Number</u></b>	<b><u>Asset</u></b>	<b><u>Sponsor</u></b>	<b><u>Subject</u></b>	<b><u>Document</u></b>	<b><u>Comments</u></b>
23	Commuter Rail	AREA	Tunnel Construction	AREA- Manual for Railway Engineering Chapter 1, Part 8	Specifications for Tunnel Construction
24	Commuter Rail	AREA	Tunnel Linings	AREA- Manual for Railway Engineering Chapter 8	Specifications for Lining Tunnels With Concrete
25	Commuter Rail	AAR	Standards	Communication Manual of Recommended Practice	Guidelines and Specifications for Railroad Communication Systems
26	Commuter Rail	FRA	Signal Rules	Code of Federal Regulations Number 49, Parts 233 Through 236	Rules, Standards and Instructions Governing Signal Control Systems
27	Commuter Rail	AAR	Signals	Signal Manual of Recommended Practice	Guidelines and Specifications for Signal Systems
28	Commuter Rail	NORAC	Operating Rules	Northeast Operating Rules Advisory Commission	Standardized Set of Operating Rules for Eastern U.S.
29	Commuter Rail	NORAC	Operating Rules	General Code of Operating Rules	Standardized Set of Operating Rules for Western U.S.
30	Commuter Rail	NORAC	Grade Crossings	Manual of Uniform Traffic Control Devices (MUTCD)	Signal Standards for Grade Crossings
31	Commuter Rail	AREA	Track	AREA- Manual for Railway Engineering Chapters 1, 2, 3, 4, 5, 9, 10, and 28	Various Chapters Concerning All Aspects of Track Design and Maintenance
32	Commuter Rail	FRA	Track Inspections	Code of Federal Regulations Number 49	Rules and Standards for Inspecting Track

<b><u>Number</u></b>	<b><u>Asset</u></b>	<b><u>Sponsor</u></b>	<b><u>Subject</u></b>	<b><u>Document</u></b>	<b><u>Comments</u></b>
33	Commuter Rail	FRA	Inter-City Commuter Rail Cars	Code of Federal Regulations Number 49, Parts 200 Through 268	
34	Commuter Rail	AAR	Standards	AAR Standards	Manufacture, Tests and Quality Control
35	Tunnels	AREA	Tunnel Construction	AREA- Manual for Railway Engineering Chapter 1, Part 8	Specifications for Tunnel Construction
36	Marine Structures	NAVFAC	Structures	Facilities Handbook	Piers, Docks, Bulkheads and Structures
37	Vehicles	USDOT	Vehicle Procurements	Conducting Pre-Award and Post-Delivery Audits for Bus Procurements	
38	Vehicles	USDOT	Buses	Bus Fleet Management Principles and Techniques	
39	Vehicles	USDOT	Wheelchair Lifts	Guideline Specifications for Passive Lifts, Active Lifts, Wheelchair Ramps and Securement Devices	
40	Vehicles	USDOT	Bus Purchases	Conducting Pre-Award and Post-Delivery Audits for Bus Procurements	
41	Vehicles	National Research Council	Capital Planning	Transit Capital Investment to Reduce Operating Deficits- Alternative Bus Replacement Strategies- Report 15	Bus Replacement and Rehabilitative Strategies
42	Vehicles	APTA	Bus Maintenance	Guidelines for Bus Maintenance	



<b><u>Number</u></b>	<b><u>Asset</u></b>	<b><u>Sponsor</u></b>	<b><u>Subject</u></b>	<b><u>Document</u></b>	<b><u>Comments</u></b>
43	Vehicles	FTA	Buses	Circular 90310.1A	Useful Life and Spare Ratio Standards for Buses and Vans
44	Vehicles	USDOT	Vehicle Procurements	Code of Federal Regulations Number 49, Parts 663.27 and 663.23	
45	Vehicles	NFPA	Fire Protection	NFPA 130	
46	Vehicles	ASTM	Transit Vehicles	ASTM 119, 162, 662	
47	Vehicles	ASTM	Transit Vehicles	ASTM 3675	
48	Vehicles	FAR	Transit Vehicles	FAR 25.853	
49	Vehicles	IEEE	Transit Vehicles	IEEE 10, 11, 16, 383	
50	Vehicles	UL	Transit Vehicles	UL 44	
51	Electrical Systems	APTA	Design Guidelines	Joint Trackwork Electrical Design Guidelines	
52	Electrical Systems	APTA	Wire Specification	Performance Specifications for Electric Wire and Cable Used in Underground Transit Systems- Parts 1 and 2	
53	Electrical Systems	AREA	Standards	AREA- Manual for Railway Engineering Chapter 12, Part 5	Standards for Transit Electrification Systems

<b><u>Number</u></b>	<b><u>Asset</u></b>	<b><u>Sponsor</u></b>	<b><u>Subject</u></b>	<b><u>Document</u></b>	<b><u>Comments</u></b>
54	Electrical Systems	AREA	Standards	AREA- Manual for Railway Engineering Chapter 33	Standards for Railroad Transmission Systems
55	Electrical Systems	AREA	Standards	National Electrical Safety Code (NESC)	
56	Track (Transit)	APTA	Welded Rail	Continuous Welded Rail on Aerial Structure- Examples of Transit Practice	
57	Track (Transit)	AREA	Track	AREA- Manual for Railway Engineering Chapter 12, Part 3	Design Considerations for Transit Track (In Development)
58	Vessels	FRA	Manning and Inspection	Code of Federal Regulations Number 46	Design, Construction and Maintenance of Ships
59	Vessels	FRA	Operation	Code of Federal Regulations Number 33	Operation of Ships
60	Vessels	ABS	Rules and Regulations	Rules for Building and Classifying Steel Vessels	

## APPENDIX E

### BIBLIOGRAPHY

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## APPENDIX F

### GLOSSARY

<b>AAR</b>	Association of American Railroads	<b>ISTEA</b>	Intermodal Surface Transportation Efficiency Act
<b>AREA</b>	American Railway Engineering Association	<b>Mode</b>	Mode of transit types as defined by the Federal Transit Administration
<b>Asset</b>	Public transit facilities (e.g., maintenance shops, stations, terminals, and transitrelated structures), equipment, and rolling stocks.	<b>MPO</b>	Metropolitan Planning Organization
<b>ASTM</b>	American Society for Testing and Materials	<b>NAVFAC</b>	Naval Facilities Engineering Command
<b>BMS</b>	Bridge Management System	<b>NFPA</b>	National Fire Protection Association
<b>CMS</b>	(Traffic) Congestion Management System	<b>NORAC</b>	Northeast Operating Rules Advisory Commission
<b>Condition Rating</b>	Physical rating describing the physical condition of the inspection unit (e.g., the bus is in "good" condition.)	<b>Operator</b>	Organization responsible for operating the asset
<b>Estimated Remaining Life</b>	Estimate of remaining useful life of an inspection unit	<b>Owner</b>	Organization that currently owns the asset
<b>FAR</b>	Federal Acquisition Regulations	<b>PBS</b>	Physical Breakdown Structure is a hierarchical description of asset elements by successive classification. For example, the propulsion system of a subway car could be described in a PBS as "rail rolling stock/propulsion system/electrical." In this example, the physical breakdown categories are "asset category/major system/system type."
<b>FHWA</b>	Federal Highway Administration	<b>PMS</b>	Pavement Management System
<b>Fixed Data</b>	Attributes describing an asset that do not change over time (e.g., serial #, model #, and manufacturer).	<b>Potential Action</b>	Action that may be taken to address current deficiencies or forecasted requirements. Potential actions can include refurbishment, rehabilitation, and lifecycle replacement.
<b>FTA</b>	Federal Transit Administration	<b>PTMS</b>	Public Transportation Facilities and Equipment Management System
<b>FRA</b>	Federal Railroad Administration	<b>Refurbishment</b>	Actions where existing equipment or facilities are restored to adequate levels without replacing major parts or components. Refurbishments should result in sustainment of the asset or inspection unit.
<b>Functional Rating</b>	Assessment of how well the inspection unit is performing its designed function (e.g., the functional rating of the bus is "substandard," because it is not compatible with ADA or alternative fuel requirements). Comparing this example to the condition rating example shows how the two ratings are independent.	<b>Rehabilitation</b>	Actions where worn or weakened materials, components, and systems are replaced with new parts that have basically the same design or function as the original equipment
<b>IEEE</b>	Institute of Electrical and Electronic Engineers		
<b>IMS</b>	Intermodal Management System		
<b>Inspection Unit</b>	The element or elements of the asset that are assigned condition and functional ratings		

<b>Replacement</b>	Actions where worn or weakened materials, components, and systems are replaced with new parts (could be in-kind or upgrade).		maintenance facilities, stations, terminals, and transit-related structures), equipment, and rolling stocks.
<b>SMS</b>	(Highway) Safety Management System	<b>Transit Agency</b>	Agency that owns and/or operates public transportation assets and services and has a PTMS participation role
<b>Standard Life</b>	Industry standard life expectancy for a generic inspection unit	<b>TMA</b>	Transportation Management Area
<b>State</b>	State agency that has a PTMS participation role	<b>UL</b>	Underwriters Laboratories
<b>TMS/H</b>	Traffic Monitoring System for Highway	<b>UMTA</b>	Urban Mass Transit Administration
<b>Transit Assets</b>	Public transportation facilities (e.g.,	<b>Variable Data</b>	Attributes describing assets that change over time (e.g., performance or condition).

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