# TABLE OF CONTENTS

Reliable Fit-Up of Steel I-Girder Bridges .................................................. 1
  Coletti, Domenic A.; White, Donald W.; Nguyen, Thanh V.; Chavel, Brandon W.; Grubb, Michael A.; Boring, Calvin G., Jr.

Physical Testing to Determine Ultimate Strength of Bolted Longitudinal Seams in Deep Corrugated Structural Plate for Long-Span Structures ........................................ 9
  Keene, Robert W.; Richie, Matthew C.; Beaver, Jesse L.; Sanders, Darrell

Elastomeric Concrete Plug Joints: A New Durable Bridge Expansion Joint Design ............................................. 18
  Balakumaran, Soundar S. G.; O’Neill, Kevin; Springer, Todd C.; Matteo, Adam

Periodic Temperature-Based Bearing Assessment of a Steel Multigirder Bridge ................................................... 26
  Warren, Maria E.; Dubbs, Nathaniel C.

Washington State Evaluation of Performance-Based Concrete for Bridge Decks ................................................. 35
  Khaleghi, Bijan

Problems with Continuous Spliced Posttensioned–Prestressed Concrete Bulb-Tee Girder Center Spans at West Point, Virginia ................................................................. 46
  Sprinkel, Michael M.; Balakumaran, Soundar S. G.

Performance Evaluation of Transverse High-Performance Concrete Closure Pour Connection for Use in Modular Bridge Construction .................................................. 55
  Deng, Yaohua; Phares, Brent M.; Putz, Andrew J.; Carter, Curtis

Performance Evaluation of a Reinforced Concrete Slab Bridge Retrofitted with Carbon Fiber Reinforcement Polymer Laminate System ......................................................... 68
  Regalado, Arturo; Carpenter, Brice A.; Jáuregui, David V.; Weldon, Brad D.

Continuous Load Scaling: New Method of Simulating Longitudinal Live Load Spreading for Two-Dimensional Analysis of Buried Culverts ........................................... 77
  Katona, Michael G.

Tensile Behavior of Pultruded Fiber-Reinforced Polymer Laminates with Bonded and Bolted Splice Joints ...................................................... 91
  Nguyen, Hai; Zatar, Wael; Mutsuyoshi, Hiroshi

Impact of Overweight Trucks on the Service Life of Bridge Girders ................................................................. 103
  Lou, Peng; Nassif, Hani; Su, Dan; Truban, Paul

New Approach for Screening Overweight Vehicles: Allowable Ranges of Axle Configurations .............................. 118
  Milutinovic, Goran; Kusiak, Chris; Bowman, Mark; Prakash, Arun

Vehicle–Track–Bridge Interaction Modeling and Validation for Short Span Railway Bridges .............................................. 127
  Rakoczy, Anna M.; Shu, Xinggao; Otter, Duane

Deconstruction Monitoring of a Steel Truss Bridge .................................................................................. 139
  Yarnold, Matthew; Salaman, Stephen; James, Eric

Connections for Integral Jointless Bridges in Seismic Regions Suitable for Accelerated Bridge Construction ................................................................. 147
  Yen, W. Phillip; Dekelbab, Waseem; Khaleghi, Bijan

Effect of Shear Keys on Seismic Response of Irregular Bridge Configurations .................................................... 155
  Sprinkel, Michael M.; Balakumaran, Soundar S. G.

Damage Assessment of Tunnel Lining by Mobile Laser Scanning .............................................................................. 166
  Tabrizi, Kaz; Celaya, Manuel; Miller, Bradley S.; Wittwer, Andreas; Ruzzi, Louis

Fixed Fire Suppression for Eisenhower and Johnson Tunnels: Improving Facilities by Leveraging Nontransportation Expertise ........................................................................ 180
  Hareison, Stephen; Shelly, Raelee; Kraft, Elizabeth; Rondinelli, Steve; Miller, Jason

Author Index
