Twelfth Statewide Conference on Local Bridges
Syracuse, New York - October 26-27, 2005

**AGENDA**

**Wednesday, October 26, 2005**

<table>
<thead>
<tr>
<th>Start</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Welcome/Opening Remarks</td>
<td>George Christian, NYSDOT Carl Ford, NYSDOT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Randy Gibbon, NYSCHSA</td>
</tr>
<tr>
<td>8:15</td>
<td>NYSDOT Update</td>
<td>Cliff Thomas, NYSDOT</td>
</tr>
</tbody>
</table>

**SESSION #1 - GENERAL TOPICS**

*Moderator: George Christian, NYSDOT*

<table>
<thead>
<tr>
<th>Start</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30</td>
<td>Assistance Program Evaluation</td>
<td>Henry Hren, NYSDOT</td>
</tr>
<tr>
<td></td>
<td>Bureau Overview</td>
<td></td>
</tr>
<tr>
<td>8:40</td>
<td>Locally Administered Federal Aid</td>
<td>Mary Anne Mariotti, NYSDOT</td>
</tr>
<tr>
<td></td>
<td>Process Updates</td>
<td></td>
</tr>
<tr>
<td>8:55</td>
<td>Training Subcommittee Update</td>
<td>Rich Marchione, NYSDOT</td>
</tr>
<tr>
<td>9:05</td>
<td>ROW Appraisals &amp; Acquisitions</td>
<td>Phil Pierce, Delaware County</td>
</tr>
<tr>
<td>9:35</td>
<td>Scour Action Plan</td>
<td>Mike Sullivan, NYSDOT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cynthia Nurmi, FHWA</td>
</tr>
<tr>
<td>9:55</td>
<td>Break</td>
<td></td>
</tr>
</tbody>
</table>
Twelfth Statewide Conference on Local Bridges  
Syracuse, New York - October 26-27, 2005  
AGENDA

**Wednesday, October 26, 2005**

**Session #2 - FEATURED REGION - NYSDOT, Region 9**  
*Moderator: Dave Ligeikis, NYSDOT*

<table>
<thead>
<tr>
<th>Start</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:25</td>
<td>Introduction to Region 9</td>
<td>Dave Ligeikis, NYSDOT R9</td>
</tr>
<tr>
<td>10:35</td>
<td>Main St. over Susquehanna River</td>
<td>Roger Laime, Earth Tech Inc.</td>
</tr>
<tr>
<td></td>
<td>Cooperstown, NY</td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>McKinley Ave. Bridge over Norfolk Southern Railroad, Endicott</td>
<td>Ralph Verrastro, Delta Engineers</td>
</tr>
<tr>
<td>11:25</td>
<td>Rehabilitation of Memorial Bridge over Chenango River</td>
<td>Gary Holmes, City of Binghamton, McFarland-Johnson, Inc.</td>
</tr>
<tr>
<td>11:45</td>
<td>Replacement of CR 34 Bridge over Elk Creek, Town of Maryland</td>
<td>Ron Tiderencel, Otsego County, James Craig, C&amp;S Engineers</td>
</tr>
<tr>
<td>12:15</td>
<td>Lunch</td>
<td></td>
</tr>
</tbody>
</table>
### Twelfth Statewide Conference on Local Bridges

**Syracuse, New York - October 26-27, 2005**

**AGENDA**

**Wednesday, October 26, 2005**

**SESSION #3 - LOCAL BRIDGES**

*Moderator: Carmen Garozzo, ABCD*

<table>
<thead>
<tr>
<th>Start</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30</td>
<td>Replacement of The Sodus Bay Bridge</td>
<td>Jim Brady, Wayne County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paul Sudol, Barton &amp; Loguidice</td>
</tr>
<tr>
<td>2:00</td>
<td>New Oregon Road Bridge Replacement</td>
<td>Carl Dimmig, Erie County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jonathan DePlanche’, TVGA</td>
</tr>
<tr>
<td>2:30</td>
<td>Walton St. Bridge Replacement</td>
<td>Chris Rauber, City of Syracuse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chuck Stanton, C&amp;S Engineers</td>
</tr>
<tr>
<td>3:00</td>
<td>Covered Bridge Manual Update</td>
<td>Phil Pierce, Delaware County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Earl Dubin, FHWA</td>
</tr>
<tr>
<td>3:30</td>
<td>Break</td>
<td></td>
</tr>
</tbody>
</table>
**Twelfth Statewide Conference on Local Bridges**  
Syracuse, New York - October 26-27, 2005  
**AGENDA**

**Wednesday, October 26, 2005**

**SESSION #4A - LOCAL AGENCY FORUM**  
*Moderator: Vince Spagnoletti - Steuben County*

<table>
<thead>
<tr>
<th>Start</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00</td>
<td>Break out session for Local Agency Representatives</td>
</tr>
</tbody>
</table>

**SESSION #4B - GENERAL TOPICS**  
*Moderator: Earl Dubin- FHWA*

<table>
<thead>
<tr>
<th>Start</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00</td>
<td>Troup-Howell Bridge Project</td>
<td>Howard Ressel, NYSDOT Region 4</td>
</tr>
<tr>
<td>4:30</td>
<td>I-90 over Anderson Drive</td>
<td>Dan Logel, Bridgetek</td>
</tr>
<tr>
<td>5:00</td>
<td>Bridge Deck Update</td>
<td>Bob Curtis, NYSDOT</td>
</tr>
<tr>
<td>6:00</td>
<td>Social Hour</td>
<td></td>
</tr>
<tr>
<td>7:00</td>
<td>Dinner/Speaker</td>
<td></td>
</tr>
<tr>
<td>Start</td>
<td>Topic</td>
<td>Presenter</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>8:15</td>
<td>Preventative Maintenance</td>
<td>Pete Weykamp, NYSDOT</td>
</tr>
<tr>
<td>8:45</td>
<td>Healers/Sealers and Thin Polymer Overlays</td>
<td>John Filjones, NYSDOT</td>
</tr>
<tr>
<td>9:15</td>
<td>Vertical Down Initiative</td>
<td>Doug Rose, NYSDOT</td>
</tr>
<tr>
<td>9:45</td>
<td>Break</td>
<td></td>
</tr>
</tbody>
</table>
### SESSION #6 - GENERAL TOPICS
*Moderator: Bo Mansouri - Monroe County*

<table>
<thead>
<tr>
<th>Start</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15</td>
<td>County Forum Report</td>
<td>Vince Spagnoletti, Steuben County</td>
</tr>
<tr>
<td>10:30</td>
<td>Reinforcing Bar Options: A Durability, Use, And Cost Comparison</td>
<td>Harry White, NYSDOT</td>
</tr>
<tr>
<td>11:00</td>
<td>Belgium Bridge Re-Hab &amp; Relocation</td>
<td>Kurt Bower, Region 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tom Siwula, C&amp;S Engineers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tom Horth, C&amp;S Engineers</td>
</tr>
<tr>
<td>11:30</td>
<td>Quality Assurance on Steel Bridges</td>
<td>Paul Rimmer, NYSDOT</td>
</tr>
<tr>
<td>12:00</td>
<td>Final Questions &amp; Wrap-up</td>
<td>George Christian, NYSDOT</td>
</tr>
</tbody>
</table>
Synopsis:
As part of NYSDOT’s Transformation process, the Assistance Program Evaluation Bureau (APEB) was recently created to provide a centralized, Main Office operation designed to improve the Department’s knowledge and oversight of local capital projects – particularly those that are federally-aided – and to capitalize on planning opportunities where common State and local project objectives are identified. Recently, an operational and organizational plan for APEB was approved. The plan establishes APEB’s duties, responsibilities, and functions, and articulates both its short- and long-term program objectives.

This presentation is intended to provide an overview of APEB’s organizational structure and its operational plans, and to convey the methods, assistance, and services that APEB will undertake to improve the local project process.

About the Presenter:

Henry E. Hren Jr., graduated from the College of Saint Rose in 1988 with a Bachelor of Arts degree in History/Political Science. In 1988, he started his career in public service upon accepting the position of Legislative Assistant at the New York State Senate. At the same time, Henry enrolled at the Nelson A. Rockefeller College of Public Affairs and Policy where he pursued, and later received (1990), a Master’s degree in Public Administration.

In 1989, Henry accepted a position at the New York State Division of the Budget (DOB) where he worked in a variety of financial positions, maintaining budgetary responsibilities for several State agencies. In 1998, Henry was requested by the Governor’s Appointments Office to take a one-year assignment at the NYS Financial Control Board for the City of Yonkers to serve as the Deputy Executive Director responsible for overseeing the termination of the Control Board as per statutory requirements.

In 1999, Henry rejoined DOB where he was appointed Team Leader responsible for managing staff preparation and execution of NYSDOT’s, the Department of Motor Vehicles’, and the Office for Technology’s annual and multi-year operating and capital Budgets. Henry continued in this position until May 2004, when he accepted the position of Bureau Director within NYSDOT’s former Office of Passenger and Freight Transportation, Passenger Transportation Division. As part of NYSDOT’s Transformation process, Henry was recently named the Bureau Director of the new Assistance Program Evaluation Bureau (APEB).
Mary Anne Mariotti, P.E.
Assistance Program Manager
NYSDOT Office of Program Development & Management
50 Wolf Road POD 33
Albany, NY 12232
Phone: (518) 457-3426
E-mail: mamariotti@dot.state.ny.us

Synopsis:
As part of the FHWA/NYSDOT TEA-21 Agreement, NYSDOT may delegate part of its approval authority for locally administered Federal-Aid projects through the issuance of a manual and guidelines. Hence, the “Procedures for Locally Administered Federal Aid Projects Manual” was created. This manual provides guidance on the processes, procedures, authorizations, and approvals to ensure these projects are progressed in accordance with Federal and State requirements.

The manual allows for expected updates to ease, improve and simplify the process. These efforts are based on feedback and suggestions received from FHWA, Regional Local Project Liaisons (RLPL’s), Local Project Sponsors, and others who play a role in the delivery of Local Projects. This year we are bringing our focus to best practices and statewide consistency. It is our intent to provide simple, user friendly mechanisms to continue to progress these quality projects in a timely manner.

This presentation will give you an update on the status of these efforts.

About the Presenter:

Mary Anne Mariotti graduated from Clarkson University in 1988 with a Bachelor of Science degree in Civil/Environmental Engineering. She started her career in 1988 at NYSDOT, and then worked for three years in the private sector before returning to NYSDOT.

She has Regional and Main Office experience and currently works in the Office of Program Management and Development as the Assistance Program Manager for the Assistance Program Evaluation Bureau. Her experience emphasizes on Program and Project Management. It also includes Structural Engineering, Project Development, Material Engineering, Site Development, Highway Construction Inspection, Highway Design, Traffic Engineering, and Bridge Inspection.

Currently Mary Anne is responsible for resolving statewide local program and project administrative and engineering issues. She maintains close coordination with FHWA on local procedural development and maintenance. Her responsibilities include providing clear, effective guidance on Local Program and project oversight, and establishing and managing working groups for revising process activities.
Richard Marchione  
NYSDOT, Structures Division  
50 Wolf Road, POD 43  
Albany, NY 12232  
Phone: (518) 457-2436  
rmarchione@dot.state.ny.us

Synopsis:

The Statewide Conference on Local Bridge's Steering Committee instructed the Training and Communication Subcommittee to focus on forming an effective partnership among NYSDOT, local highway officials, and the Cornell Local Roads Program to identify training and communication opportunities which will strengthen or clarify technical, administrative and procedural linkages among the state’s bridge partners. To attain this, the Subcommittee, which comprises a cross-section of local, state, federal, consultant and academic professionals, has surveyed the local bridge community and has identified areas where training can help local bridge owners maintain their structures. The Subcommittee update will discuss yesterday's training session and where the Subcommittee is headed in the coming year.

About the Presenter:

Rich Marchione is the Director of the Structures Division’s Structural Engineering Services Bureau which provides technical support for the statewide bridge construction program. Prior to that, he supervised NYSDOT’s Structures Design Quality Assurance Bureau, Region 1-10 Review Unit, where he reviewed bridge designs prepared by consultants and NYSDOT Regions. In addition to serving on the Statewide Conference on Local Bridge's Training and Communication Subcommittee since its inception, the last six years as Chairman, he was a member of the Local Projects Team that developed the NYSDOT Procedures for Locally Administered Federal Aid Projects Manual. Rich has been with the Department for 22 years.
Synopsis:

The lack of purchased right-of-way is a continual source of frustration for owners and operators of our transportation network. The situation is especially relevant and acute for counties undertaking Federal-aid projects. Like many others, Delaware County has developed procedures and practices to address issues related to right-of-way easements and purchase. Recent efforts have uncovered differences in practice among sister counties and the state that were somewhat surprising. Phil Pierce, Deputy Commissioner of the Delaware County Department of Public Works, will discuss these issues.

About the Presenter:

Since graduating from Penn State with a BSCE in 1972, Phil Pierce has pursued a career revolving around bridge and highway engineering. Having worked for consulting firms in increasing roles of responsibility for over 27 years, he made a mid-life career change to municipal service where he currently works as Deputy Commissioner at the Delaware County Department of Public Works. Responsible for the engineering related to 270 miles of County roads and over 350 bridges and large culverts, Phil has faced many of the issues and conundrums that challenge municipal engineers. Right-of-way is one of them - the topic of his presentation today.
An updated rule of the National Bridge Inspection Standard (NBIS) was enacted on January 13, 2005. A requirement of the updated NBIS rule is the development of a Plan of Action (POA) for each bridge that is classified as scour critical according to National Bridge Inventory (NBI) Item 113. Ms. Cynthia Nurmi will share strategies used by some DOTs for developing and implementing POAs. Mr. Mike Sullivan will discuss Item 113 definitions and the scour assessment procedure used by NYSDOT.

About the Presenters:

**Cynthia Nurmi** graduated from Georgia Tech with a Bachelors Degree in Civil Engineering in 1984. She went on to complete her Masters in Civil Engineering in 1985 also at Georgia Tech. Cynthia began her career in the mid-1980’s working for various site development firms before joining MARTA in the Conceptual Engineering and Design Unit from 1987 to 1992. She spent the next seven years with the Federal Energy Regulatory Commission in Dam Safety before becoming a Hydraulic Engineer in FHWA’s Atlanta office in 1999. Cynthia has worked as Task Manager for the development of the POA Module and Workshop and has assisted over ten divisions with Plans of Action. She is a licensed professional engineer in the State of Georgia.

**Mike Sullivan** is a New York State licensed Professional Engineer in the Main Office Structures Design and Construction Division, NYSDOT. He graduated from Worcester Polytechnic Institute in 1990 with a Bachelor of Science in Civil Engineering. Mike has been with the Department for fifteen years and has been assigned to the Bridge Safety Assurance Unit for the past seven. Prior to his work in the BSA Unit, he spent eight years in Bridge Design. He is currently responsible for maintenance and end user support for the Department’s Hydraulic, Overload, and Seismic Vulnerability programs. He is also responsible for compiling Federal NBIS (scour critical) codes for all bridges in New York State and preparing the NBIS Annual Bridge Scour Report for the FHWA. Mike is currently serving on a National Cooperative Highway Research Program panel (NCHRP Synthesis Topic 36-02 - Practices for Monitoring Scour Critical Bridges). Mike can be contacted at the address above if you have any questions or comments concerning the FHWA Plan of Action Requirements for Scour Critical Bridges.
SESSION 2.1
INTRODUCTION TO REGION 9

Dave Ligeikis, P.E.
NYSDOT, Region 9
44 Hawley Street
Binghamton, NY 13901
Phone: (607) 721-8150
DLIGEIKIS@dot.state.ny.us

Synopsis:

Mr. Ligeikis will present an overview of the infrastructure in Region 9 and its Capital Program, focusing on some of the more unique issues and features in the Region.

About the Presenter:

David Ligeikis has been with Region 9 (Binghamton) of the New York State Department of Transportation since 1973, graduating from Worcester Polytechnic Institute (Mass.) with a BS in Civil Engineering. He was promoted to the position of Regional Planning and Program Manager (RPPM) in 1983. Since 2002, he has served in the dual capacity of RPPM and Acting Regional Design Engineer. He has also twice served as the Acting Region 9 Real Estate Officer. He is married, with five children and 1 grandchild (with another on the way). His wife Kelli is an Associate Professor and chair of the Civil Engineering Technology Department at Broome Community College in Binghamton. Mr. Ligeikis is a registered Professional Engineer in the State of New York.
Synopsis:

The replacement of the Main Street Bridge over the Susquehanna River began in 2000. The Towns of Otsego and Middlefield along with the New York State Department of Transportation agreed that the deteriorating structure needed replacement in order to facilitate continued traffic into and out of the historic business district. The National Baseball Hall of Fame is within walking distance to the bridge and has been a constant draw for tourists since its grand opening in 1939. The bridge also serves as a unique vantage point for the General Clinton Canoe Regatta which is held annually on Memorial Day. The regatta passes directly beneath the bridge and each year, several hundred tourists turn out to witness the event.

Several design alternatives were considered, with the 28.5 meter simple span, prestressed concrete box beam bridge selected. Special architectural treatments were added at the recommendation of the SHPO and representatives of the Towns. The structure was dedicated on November 4, 2003.

The presentation will highlight several design considerations when working in an historic district in addition to working within a local business district. Construction photos will be used to demonstrate key aspects of many design and construction elements.

About the Presenter:

Roger Laime received his B.S. from the University of Rhode Island and his M.B.A. from the State University of New York at Albany. He is currently the Engineering Services Manager for Earth Tech’s Albany office, which involves scheduling and supervision of daily operations, managing all phases of design and construction inspection projects, development and training of professional staff and the implementation of quality control/quality assurance programs. Roger has over 22 years of experience as a structural engineer and bridge design engineer working for both NYSDOT and the Thruway Authority, and has completed projects for county and local agencies. He has worked on a wide variety of projects including complex curved structures, truss rehabilitation/replacements, a “Channel Bridge” design, rigid frame culverts and several LDSA projects throughout New York State.
SESSION 2.3
McKinley Ave. Bridge over Norfolk Southern Railroad, Endicott

Ralph Verrastro, PE
Delta Engineers, PC
164 Court Street
Binghamton, NY 13901
Phone: (607) 231-6602
Fax: (607) 231-6650
E-mail: rverrastro@deltaengineers.com
Web: www.deltaengineers.com

Rick Miller
Director, Village of Endicott
Public Works

Rick Trebilcock
Delta Engineers, PC

Synopsis:
This presentation provides a case study review of the rehabilitation of the McKinley Avenue Bridge over the Norfolk-Southern Railroad in the Village of Endicott, New York. The rehabilitation of this nine (9) span, combination concrete tee beam and steel rolled multi-beam, and concrete deck bridge should have been a routine project based on the proposed repairs and upgrades. Routine - it was not. This presentation provides insights into the challenges and complexities that the owner, engineer and contractor dealt with including:

- The bridge deck on seven of the spans serves as a roof for building spaces owned by IBM that contained expensive equipment and provided a workspace for some manufacturing employees performing operations that could not be closed down.
- One of the spans crosses a loading dock.
- One of the spans crosses an active railroad line.
- Fourteen (14) different types of utility lines are either immediately adjacent to, or supported by, the bridge including a high voltage power transmission line, fiber optic data transmission line, and a main trunk phone line – to name a few.
- The difficulties related to gaining access to work areas due to the high level of security that IBM requires in its workspaces and due to equipment that was in the way.
- Some decisions were complicated due to the unclear lines of responsibility and authority between the Village of Endicott and IBM.

About the Presenters:

Rick Miller is the Village of Endicott Public Works Director and was involved with the McKinley Avenue Bridge project. He has close to 40 years working experience in a public works or Utility field, starting with the U. S. M. C. Construction Engineers in Vietnam in 1966 and 1968 building and maintaining Roads and Bridges. He has managed to stay in a closely related field ever since.
Ralph Verrastro is the President of Delta Engineers and serves as the Principal-In-Charge of the firm’s bridge design projects for State DOTs, local municipalities, and private land developers. His primary duties include strategic planning, operations management, administrative supervision, marketing, sales, client relations, project teaming, project management, technical supervision, and quality assurance. Ralph graduated from Cornell University with a BS in Civil Engineering in 1976 and he is a licensed professional engineer in 37 states. He is a technical expert on small and medium span bridges, the rehabilitation of historic truss bridges, and the design of precast concrete structures. Ralph has provided technical presentations, on these topics, to industry groups that include: New York State Association of Transportation Engineers, New York State County Highway Superintendents Association, National Association of County Engineers, American Public Works Association, Association of Bridge Construction and Design, American Society of Civil Engineers, National Precast Concrete Association, Precast Concrete Association of New York and the International Bridge Conference. He has also published technical articles in industry publications that include: Proceedings of the International Bridge Conference, MC Magazine, Revitalization, Land Development Today and CPI – Concrete Plant International. Ralph has served on the Editorial Board for STRUCTURE magazine and as an Adjunct Professor for engineering courses at Broome Community College in Binghamton, NY.

Rick Trebilcock is a Senior Engineer in the Transportation Department at Delta Engineers. He was the consultant Project Engineer during design and Engineer-In-Charge during construction of the McKinley Avenue Bridge project. He has worked for Delta Engineers, P.C. for 15 years performing design and construction inspection on many NYSDOT, County and local municipality bridge projects.
Synopsis:

The Memorial Bridge is a four-lane, 534 foot long five span earth-filled spandrel wall, concrete arch bridge, which carries Riverside Drive over the Chenango River in the City of Binghamton. The bridge, originally constructed in 1923 and rehabilitated in 1972, was determined eligible for listing in the National Register of Historic Places in January 2000.

The design phase of the Memorial Bridge Rehabilitation Project began in 2000; the project was let in December 2002, and is anticipated to be complete in September 2005. The project includes: replacement of spandrel walls and earth fill over the arch; repairs to the concrete arch, piers, and retaining walls; incorporation of a pedestrian underpass through the retaining walls and under the approach roadway, and; approach roadway improvements. This work was performed under staged construction to maintain vehicular traffic (one lane in both directions) and pedestrian traffic at all times.

This presentation will:
- provide a general overview of the project
- discuss the key issues and unique engineering challenges encountered and overcome during the design and construction phases of the project
- discuss the importance of municipalities working closely with the NYSDOT, engineering consultants, and regulatory agencies during all phases of a project

About the Presenters:

Gary Holmes has served as the City Engineer for the City of Binghamton for over eight years. Mr. Holmes is a registered Professional Engineer in New York State with thirty-two years of experience. He worked for private consulting firms for thirteen years in Pennsylvania, Delaware and New York. For eleven years, he was an Engineer with the Broome County Department of Public Works. Mr. Holmes graduated from Broome Community College and attended the University of Delaware. He has been involved in numerous New York State Department of Transportation and Federally-funded projects.
Mark Hugaboom is a Transportation Manager at McFarland-Johnson, Inc., where he has worked for approximately five years on bridge and highway design projects. Mr. Hugaboom is a licensed Professional Engineer in New York, Pennsylvania, and Connecticut. His previous work experience includes seven years at a private consulting engineering firm in Connecticut. Mr. Hugaboom is a graduate of Clarkson University with a B.S. in Civil Engineering and of SUNY Potsdam with a B.A. in Physics.
Synopsis:

This presentation provides a look at a local bridge replacement project with many challenges. For 64 years, the traveling public in the Town of Maryland, Otsego County, NY had to negotiate a 90° turn at the Elk Creek crossing with an advisory posting of 10-mph on a 55-mph roadway. The bridge is located in an agricultural area outside of the Village of Schenevus. The Otsego County Highway Department determined that the construction of a new curved girder bridge on a curved roadway alignment was the most efficient solution. This solution provided the best means of improving driver safety and replacing the structurally deficient existing bridge, while allowing single stage construction by maintaining traffic on the existing highway alignment. The new roadway alignment, with a 195 meter radius, facilitated an improved advisory posting of 35-mph. The non-standard design criteria justification for not providing a 55-mph horizontal curve included the fact that a local farm would be eliminated and several local residences would no longer have access to CR 34 if a 55-mph curve was constructed.

The site selected for the proposed curved CR 34 roadway and bridge presented physical, geometric, environmental and economic challenges.

Notable features of the project include:
- Major realignment of the existing roadway
- Partial realignment of the existing stream
- Curved girder superstructure with complex geometry
- Precast concrete modular T-Wall ® Retaining Wall System
- Innovative R-O-W acquisition and abandonment
- Construction of a cattle pass for dairy farm operation

The overall construction cost of the project was $2,000,000. The construction duration was 6 months and the project was completed in November 2003.
About the Presenters:

The Otsego County Board of Representatives appointed Ronald P. Tiderencel Otsego County Superintendent of Highways on July 2, 2003. Ron graduated with honors from both Oneonta High School in 1979 and from Paul Smith’s College in 1981, with a degree in Forestry. He was formerly employed by the NYSDEC before coming to Otsego County in 1986. He was appointed Otsego County Deputy Superintendent of Highways in August of 1999 and was previously the Senior Engineering Aide. He is a member of Otsego County’s Traffic Safety Board, the Otsego County Town Superintendents Association and is responsible for over 477 miles of roads, 86 bridges, 3,335 acres of forest lands, and two parks.

James Craig is currently a Senior Project Engineer with C&S. Jim received his Bachelor of Science degree in Civil Engineering from the University of Buffalo in 1993. Jim has been a design engineer/project manager on numerous LAFA, local and NYSDOT bridge projects over the past 9 years. Jim was the project manager and lead bridge engineer for the CR 34 over Elk Creek bridge replacement project. He is a member of ASCE and ABCD (Association for Bridge Construction and Design).
About the Presenter:

**Carmen Garozzo** graduated from Suny Buffalo with a BS in Civil Engineering in 1978. Mr. Garozzo’s experience includes railroad design and engineering; traffic signal planning and design and management of construction operations with a primary focus on highway and bridge transportation projects.

Mr. Garozzo has more than 27 years of diversified experience in the fields of Civil Engineering, Structural Engineering, Transportation Planning and Construction Management. He has been involved in both design and construction projects from inception to completion. His responsibilities include: design preparation, project management, construction cost estimating, report production, quality control, construction management, director of construction operations, and execution of traffic safety planning.

Mr. Garozzo has been a member of the Association for Bridge Construction and Design since 1986 and has served on the Board of Directors for the Association since 1992. He presently serves as the ABCD’s immediate past president for the Western New York Chapter. He has previously served as Board Director, Secretary, Vice President and President.

Mr. Garozzo is also an Eagle Scout and presently serves as Scoutmaster for a local WNY troop in his hometown of Derby, NY. He is a 25 year member of the Boy Scouts of America. He is married to wife Nancy, 27 years and 4 children.
SESSION 3.1

Replacement of the Sodus Bay Bridge

James Brady
Wayne County Highway Department
7227 Route 31
Lyons, New York 14489
Phone: (315) 946-5600
jbrady@co.wayne.ny.us

Jon Edinger, P.E.
Barton & Loguidice, P.C.
290 Elwood Davis Road
P.O. Box 3107
Syracuse, New York 13220-3107
Phone: (315) 457-5200
jedinger@BartonandLoguidice.com

Synopsis:

The County Route 143, Ridge Road, over Sodus Bay project for the Wayne County Department of Highways involved the replacement of the existing 55-span, 218 meter long timber structure on timber pile bents with a 28 span timber structure on steel piles. The bridge carries vehicular and pedestrian traffic over the southern end of Sodus Bay in the Town of Huron, Wayne County.

This presentation will cover several key features and factors involved in this project including:

- Utilization of 2 public meetings in order to proceed with a design meeting the expectations of the stakeholders.
- Use of suitable and appropriate materials for the site and the time of construction.
- Construction Schedule
- Consideration of stakeholder preferences for design features such as shoulder and sidewalk width.
About the Presenters:

Jim Brady was appointed the Superintendent for the Wayne County Highway Department on January 19, 1993. In this position, he oversees the work activities for a staff of 52 employees in the Highway Department, 405 miles of county highways and an annual operating budget of $8 million. Jim is a member of the New York State Town Highway Association and the New York State Association of County Highway Superintendents. Prior to coming to the county, Jim operated the Brady Tile Company, designing and installing drainage systems with multiple applications. He also was a Construction Supervisor with Elderlee, Inc. where he examined and assessed job sites, making design modifications to ensure the installation fit the field conditions. Jim earned his B.S. in Business Administration from RIT in 1968.

Jon Edinger, P.E., is currently a Senior Construction Manager with Barton & Loguidice, P.C., Consulting Engineers (B&L) headquartered in Syracuse. He is responsible for the firm's construction inspection, construction administration, and assists with the transportation planning and design of many of the firm's bridge projects. Jon received his B.S. degree in Civil Engineering from Clarkson University. Prior to joining B&L, Jon worked from the Department of Transportation for 42 years. As a former Regional Director of NYSDOT, Region 3 (Syracuse), Jon was responsible for the administration of $70-80 million annual regional transportation projects in a six county area. Jon is a licensed Professional Engineer in New York State.
Synopsis:

The New Oregon Road Bridge Replacement was performed as a demonstration project by Erie County. The main focus of the demonstration project was two-fold. The first was to utilize an innovative hybrid FRP/concrete superstructure for the new bridge. The second was to use details and methods that would provide for accelerated construction of the new bridge.

The innovative hybrid superstructure is the first bridge in Erie County using FRP in the superstructure design. It is also only the second bridge in the United States to use a hybrid FRP/concrete design, and the first bridge in North America manufactured by Wagners Composite Fibre Technologies (Australia). This design economizes the use of materials by using an integral concrete deck to take the compressive stresses, while the FRP carries the tensile loads. The hybrid superstructure is lightweight, low-maintenance, and has an expected service life of 100 years. The hybrid superstructure was also prefabricated as 4 panels, which were placed and connected in the field. By prefabricating these elements, the construction of the bridge was accelerated.

The total bridge replacement project was completed within a 31-calendar-day period. During that time, the following was accomplished: existing short-span bridge demolished; new spread footings doweled into rock, formed, and poured; abutments and wingwalls constructed with precast concrete blocks; four (8.9 m long by 2.2 m wide) hybrid FRP/concrete superstructure panels placed, joined, and anchored; polymer and aggregate wearing surface installed; approach slabs formed and poured; approach pavement reconstructed; bridge and approach railing installed; and the bridge reopened to traffic. A 68-ton load test was also performed during this period as an extra measure of safety assurance and to confirm the theoretical design of the innovative superstructure.
The County’s low-bid Contractor fully utilized schedule incentives for the rapid construction project and commented that it “could have been done even faster.” Quality and long-term durability of the superstructure exceed conventional alternatives; therefore, anticipated life-cycle costs are less due to reduced long-term maintenance requirements.

The presentation will focus on a basic overview of the innovative hybrid superstructure design and on the County’s process for developing the project’s fast-track design, fabrication, and construction sequence, which drove the success of this project and minimized disruptions to the traveling public.

About the Presenters:

**Jonathan DePlanche** received his Bachelor’s of Science degree in Civil Engineering from the State University of New York at Buffalo. He has worked for TVGA Consultants for the past 6 years. Jon has been involved in the design of the rehabilitation or replacement of a variety of structural projects, including single and multiple-span bridges. The bridges have included steel girders, prestressed concrete box beams, and fiber-reinforced polymer (FRP) elements. He has contributed on projects from the scoping stage, through field inspection, development of alternatives, detailed design, contract document preparation, and construction inspection.

**Carl Dimmig** is currently the Erie County Bridge Engineer, a position he has held since 2002. He is responsible for the County’s bridge program, which includes addressing flags, load rating, bridge inspection, permit approvals, and review of all over-dimension truck travel on Erie County roads and bridges. He was a consulting engineer from 1972 to 2001 involved with the design and development of highway projects, culverts, and bridges. He was also involved in bridge inspection and served as Quality Control and Project Manager as well as Load Rating Team Leader from 1978 to 2000. Carl received an AAS in Civil Technology from Erie County Technician Institute (ECC) in 1969 and a BS in Civil Engineering from Tri State University in 1971.

Organizations:
Member of ABCD, ASCE, NSPE, and PCI
SESSION 3.3
Walton Street Bridge Replacement

Synopsis:

The replacement of the Walton Street Bridge over Onondaga Creek, located on the edge of the historic Armory Square District in the City of Syracuse required innovative design concepts as well as continuous effort and coordination with the downtown merchants and residents that was above and beyond the typical bridge replacement project. This presentation will provide a roadmap for Municipalities to progress projects of this type, with an overview of the following:

1. Public outreach programs – Prior to the start of this project, local businesses formed a stakeholder group to ensure that they had a voice in the project. Periodic meetings during all phases of design provided direction for the project and ensured that all stakeholders had a voice. Key concerns gleaned from these meetings were to: maintain vehicle and pedestrian traffic during construction, minimize construction time, and use the bridge project as an opportunity to enhance the character of the area;

2. Techniques to reduce construction impacts – In addition to providing stage construction, prefabricated superstructure units were incorporated, and the existing stone abutments on timber piles were reused, all with the goal of speeding construction and reducing excavation impacts;

3. Historic preservation techniques and SHPO coordination – The key to project success is early and frequent contact with SHPO regarding the proposed project and its impacts. In this project, both the Municipality and the Consultant worked hand-in-hand with SHPO from the start of the project to minimize project costs and impacts associated with a required Stage 1B investigation by shifting the Stage 1B investigation to construction, where it could be incorporated into required excavation work;

4. Project enhancements – Simple, inexpensive details like custom bridge railings, brick inlays, and ornamental lighting added to the look and character of the project and provided a finished product that complements the area.
About the Presenters:

Chuck Stanton currently holds the position of Senior Project Engineer at C&S Engineers Inc., where he is a structural engineer and project manager in their Highway/Bridge Group. He graduated from Clarkson University in 1995 with a BS in Civil Engineering, after which he spent a year and a half working for a highway/bridge contractor. Chuck took a position at C&S after moving back home to Syracuse, and has been with C&S for nine years. He holds PE's in both New York and Ohio.

Chuck has been involved with the design of over 25 bridges, comprised of a mixture of local, local aid, State, and Thruway projects in both urban and rural settings. A number of these projects have involved significant coordination with the State Historic Preservation Office and public involvement.

Christopher Rauber has served as the Division Engineer for the City of Syracuse since 2004. Chris manages the design and construction of highway projects varying in size and scope within the city. Projects which Chris has been involved with include paving, curbing, sidewalk, lighting, as well as utility replacements such as storm and sanitary storm sewers. In addition to highway projects Mr. Rauber also manages bridge rehabilitation and replacement projects. He also assists in the management of the Transportation Improvement Program (TIP) for the city, which involves coordination with many outside agencies such as NYSDEC, SHPO, FHWA, NYSDOT and other stakeholder groups and associations. Prior to his work as the Division Engineer, Chris served for 3 years as the Facilities Engineer for the City of Syracuse where he worked as a Project Engineer and manager for various highway and bridge projects including the Walton Street Bridge Replacement Project, the Solar-Kirkpatrick Street Improvement Project, the Creekwalk Project, the Lakefront Harbor Signage Project, and the Clinton Square Project.
SESSION 3.4
Covered Bridge Manual Update

Phillip C. Pierce, P.E.
6738 County Highway 14
Treadwell, NY  13846
Phone: (607) 829-5941
phil@philsbridges.com

Earl Dubin
Structural Engineer
FHWA, New York Division
O’Brien Federal Bldg.
Clinton & N. Pearl
Albany, NY  12207
Phone: (518) 431-4125, ext. 229
earl.dubin@fhwa.dot.gov

Synopsis:

A Covered Bridge Manual has been prepared and recently released by the Federal Highway Administration (it’s available for FREE!). It was specifically developed to address the preservation of historic covered bridges and contains a thorough discussion of issues relevant to all involved with these efforts. It will be of most interest to engineers and contractors, but offers good guidance to owners as well. Phillip Pierce, principle author of the manual, will discuss key aspects of the work.

About the Presenters:

Phil Pierce has 32+ years of diverse involvement with bridge engineering and is identified as one with a special passion for covered bridges. He is currently the Deputy Commissioner of the Delaware County Department of Public Works, but also began a part-time consulting practice in 2000. It was as a consultant that FHWA selected him to develop a Manual on Covered Bridges.

Earl Dubin has his Bachelor of Science in Civil Engineering from the University of Buffalo. During his career he has served as Traffic Engineer for Erie County and the City of Buffalo, as well as being the Bridge Engineer for the City of Buffalo. Currently, Mr. Dubin is a Structural Engineer with the New York Division of the Federal Highway Administration. Mr. Dubin is a Licensed Professional Engineer in New York State.
SESSION 4A
Local Agency Forum

Vince Spagnoletti
Steuben County Department of Public Works
3 East Pulteney Square
Bath, NY 14810
Phone: (607) 776-9631

About the Presenter:

Vincent Spagnoletti was appointed Commissioner of Public Works for the County of Steuben in November 1992. Mr. Spagnoletti received his Bachelor’s Degree in Civil Engineering from Clarkson College.
SESSION 4B.1
Troup – Howell Bridge Project

Howard Ressel, P.E.
NYSDOT, Region 4
1530 Jefferson Rd.
Rochester, NY 14623
Phone: (585) 272-3372
HRESSEL@dot.state.ny.us

Synopsis:

This bridge carries 1-490 over the Genesee River and several streets in downtown Rochester, NY. When deterioration necessitated a new bridge, engineers sought context sensitive replacement. The bridge's location affords opportunities for aesthetic enhancement: it is set in the foreground of the city skyline, which includes architecturally noteworthy buildings that house mainstays to international businesses such as Eastman Kodak, Xerox, and Bausch & Lomb.

The project design team included NYSDOT, Erdman Anthony and Associates, Inc. and H2L2 Architects. An Aesthetics Committee comprised of local government officials, adjoining neighborhood representatives, AIA members and artists provided feedback throughout the design process, ensuring the solution fit the environment. Many of the committee preferences were implemented to the final design.

The centerpiece of the new eight span bridge will be a 132 m (433 ft.) long through arch span crossing the river. The arch will feature three steel box ribs, Vierendeel style braces and a fanned hanger arrangement supporting the deck system. Aesthetic enhancements were achieved in many areas of the main span design. Arch anchorages were set back from the riverbanks to allow shoreline promenades beneath the bridge. Accent lighting and sculpted floorbeam shapes were provided to enhance visual interest from the promenades.

Given the through arch design, as well as the high volume of daily traffic over the bridge, there are significant challenges to be addressed during construction. Structural design details were developed to allow for staged construction which permits the bridge to remain open throughout construction.
About the Presenter:

Mr. Ressel is a Project Design Engineer with New York State Department of Transportation. He is a Licensed Professional Engineer and received a B.S. in Civil Engineering from the State University of NY at Buffalo (1984). His duties include supervising a highway design squad and overseeing the design of several ongoing highway reconstruction projects.

Mr. Ressel also serves as the Region's Metrication Manager, chairs the Region's PC Users Group and acts as representative to the Statewide Design Standards Committee. Mr. Ressel also is represented on a NCHRP project panel sponsored by the Transportation Research Board and serves as a member of the IEEE Coordinating Committee SCC14 and SI10. He is also a member of the New York State Association of Transportation Engineers and serves on several committees including the Scholarship Committee which he chairs. Mr. Ressel was chosen as the Association's Section 4 Engineer-of-the-Year in 2002.
Daniel S. Logel
New York State Regional Manager
Bridge Technologies
6541 Webster Rd
Orchard Park, NY 14127
Phone: (716) 667-0222
Fax: (716) 667-0223
E-Mail: dlogel@bridgetek.cc

Synopsis:

The bridge replacement of the bridge carrying I-90 over Anderson Drive is only a small part of the total construction project. This presentation will focus on the bridge replacement only. The structure to be replaced was a three span conventional steel stringer bridge with a cast-in-place deck. The replacement structure is a precast 36’ span arch concrete structure. The new structure is a buried structure vs. a conventional bridge. The presentation will include:

- Design engineer's reasoning for using this type of structure
- Design conflicts to overcome
- Working through constructability issues
- Providing a maintenance-free structure
- Construction photo’s to show "Out of the Box Installation Process"
- Providing the owner with the structure they wanted

About the Presenter:

Daniel S. Logel is the Regional Manager for BridgeTek New York's professional service team. Dan has an extensive background in the Construction and Precast industry with more than 16 years experience in both Sales/Engineering and the Production aspects of the business. As the Regional Manager, Dan’s responsibilities include the management of production and scheduling of all projects as well as playing an active role with the Project Consultants' sales and marketing efforts. Dan is a past member of the Board of Directors for the Precast Concrete Association of New York. Dan is also an Approved instructor for Continuing Education (PDH) sponsored by PIE.
Synopsis:

Bridge deck cracking has been a problem in New York State as well as the rest of the country for more than the last decade. High Performance Concrete has been formulated to decrease the permeability of concrete and thereby slow deterioration caused by chlorides attacking the reinforcing bars. However, when a bridge deck cracks, there is a direct path to the reinforcing steel for water and deicing chemicals. This presentation will briefly explain some of the findings of the NYSDOT’s Bridge Deck Task Force.

The emphasis of the presentation will be on the mechanics of the bridge deck cracking for bridges on steel girders. Understanding the mechanics of bridge deck cracking will lead to design and construction practices that will reduce the degree of cracking or minimize the crack size.

About the Presenter:

Robert H. Curtis is a graduate of Clarkson University and has received an MS in Structural Engineering from the University of Illinois. He has been employed by NYSDOT for 21 years during which he has served as Bridge Inspection Team Leader, Bridge Management Engineer, Regional Structures Engineer, Regional Design Engineer and most recently he has been named the Manager of Structural Engineering for the PSC-Central. Prior to his work at NYSDOT, Mr. Curtis worked for The Lane Construction Corporation and Acres American Inc.
Scott Osborn  
President of Fox Run Vineyard, Inc.  
670 Route 14  
Penn Yan, NY  14527  
Phone: (1-315) 536-4616  

Synopsis:  

The wine industry has had a profound economic impact on the Finger Lakes Region especially in the area of tourism. Mr. Osborn will talk about these effects in addition to discussing the history of the wine industry in the Finger Lakes.  

About the Presenter:  

International politics were the first interest of this Rochester native and son of two professors. Scott Osborn attended the Friends World College with campuses all over the world, and studied in Kenya, India, Thailand, Japan, and England. After college in the mid-70's, he went into the real estate development business in Lake County, California where he discovered his passion for wine. His aptitude led to cellar master positions at Firestone Vineyards, Zaca Mesa, and Byron Winery.  

Returning east in 1986, Mr. Osborn worked for a distributor, then became general manager of Long Island's Pindar Vineyards. He then moved back to Rochester and eventually he and a partner purchased Fox Run Vineyard. At first, Mr. Osborn wore both hats, as General Manager and winemaker of Fox Run, but increasing travel and speaking obligations led to the hiring of a full-time winemaker in 1995. The selection of Peter Bell as winemaker has allowed Mr. Osborn to devote more time to upgrading Fox Run's standards and practices in both the vineyard and the cellar, and to plan for Fox Run's future which he sees as intimately bound to the Finger Lakes community.  

In 1997 he was engaged by the US government through USAID to teach the emerging Hungarian wine industry and local community leaders about Wine Tourism. These highly successful workshops focused on wine tourism and the benefits to the local economy. While there he spoke on how cooperation within the wine industry and partnerships with other local tourism associations can greatly benefit wineries and the local economy.  

Mr. Osborn makes his home at Fox Run's renovated century-old farmhouse.
Pete Weykamp, P.E.
NYSDOT Preventive Maintenance
50 Wolf Road, POD 5-1
Albany, NY  12232
Phone: (518) 457-8485
Fax: (518) 457-4203
E-mail: pweykamp@dot.state.ny.us

Synopsis:

This presentation outlines the NYSDOT preventive maintenance program for highway structures. Cyclical and non-cyclical activities will be identified. Equipment, materials, methodology, and benefits for each activity will be presented. The presentation will frame the need for timely treatment, using simple tools and relatively inexpensive materials, to extend the service life of highway structures.

About the Presenter:

Pete Weykamp is the Bridge Maintenance Program Engineer for the NYSDOT. His primary duties include development of network level maintenance strategies, operations management, product evaluation, and technical supervision. Pete graduated from SUNY at Buffalo with a BS in Civil Engineering in 1983.
Synopsis:

NYSDOT Bridge Maintenance has historically had issues with concrete bridge decks that develop cracks which can lead to premature failure of the structural deck system. Typically concrete bridge deck rehabilitations and replacements involve a capital construction contract which take years to develop and can be cost prohibitive. NYSDOT Bridge Maintenance has sought simple, low cost solutions that could be applied by State maintenance forces and in short time frame (<1 month) to extend the life of a bridge deck. NYSDOT Bridge Maintenance Region 5 (Buffalo) has explored a number of systems and will relate their experiences to date.

About Presenters:

**John J. Picard** - received his Bachelor of Science in Civil and Environmental Engineering from Clarkson College of Technology in 1983. He currently works for the New York State Department of Transportation as the Regional Bridge Engineer in Region 5 (Buffalo) since July 2004. Prior to that Mr. Picard worked 20 years for the in Region 4 (Rochester) Regional Structures Group as a bridge designer, load rating engineer, and bridge design squad leader working on bridge rehabilitation and replacement projects.

**John Filjones** – began working for the NYSDOT Bridge Maintenance Group Region 5 (Buffalo) in 1975 and for the last 9 years as a Bridge Repair Supervisor 2. As a BRS2, John has been instrumental in using state-of-the-art techniques to stabilize and preserve concrete bridge decks. His practical approach is extending the life of the State’s infrastructure at a minimal capital investment. John’s leadership is recognized statewide by State Bridge Maintenance Engineers and has frequently spoke on the topic.
Douglas F. Rose, P.E.
NYSDOT, Region 1
Bridge Maintenance
328 State Street
Schenectady, NY 12305
Phone: (518) 388-0397
DROSE@dot.state.ny.us

Synopsis:

Last year the NYS Department of Transportation started two maintenance initiatives called “Vertical Down” and “Joint”. Both target deficient elements on “good” bridges. The Vertical Down initiative focuses on improving the substructure condition of bridges that are otherwise in good condition. The Joint initiative aims at preventing contamination of the substructure elements by ensuring a watertight seal at the joint. Both initiatives are performance based and can be tracked using biennial inspection data.

This presentation will cover the details of these two initiatives as well as Region One’s Bridge Maintenance’s efforts on a structure which met the criteria for both of them. Repairs were made to the concrete substructures using a “Dry-Pak-It” concrete repair system. This was the first repair done using this system in Region One. It is a pneumatic system that employs a unique concept of applying material and water to the repair simultaneously but separately through fixed nozzles. The joints were replaced with XJS armorless joints.

About the Presenter:

Doug Rose has been with DOT since 1985 and is currently the Regional Bridge Maintenance Engineer for Region One in Schenectady. He is responsible for the Bridge Maintenance Program for the 835 DOT maintained bridges in Region One. DOT bridge maintenance work is performed by 6 crews located in 5 facilities across the Region. Prior to coming to Maintenance, Doug was a Regional Structures Engineer and Bridge Management Engineer in two DOT Regions. He has a Bachelor’s Degree in Civil Engineering from Worcester Polytechnic Institute.
About the Presenter:

Vincent Spagnoletti was appointed Commissioner of Public Works for the County of Steuben in November 1992. Mr. Spagnoletti received his Bachelor's Degree in Civil Engineering from Clarkson College.
SESSION 6.2

Reinforcing Bar Options: A Durability, Use, and Cost Comparison

Harry L. White 2nd
Civil Engineer II, NYSDOT
50 Wolf Road, POD 4-3, Albany, NY  12232
Phone: (518) 485-7254

Synopsis:

This presentation discusses the opportunities and the pitfalls that recent changes in the type, availability, and cost of reinforcing steel have created for designers. Topics covered include matching the reinforcing bar to the service conditions, balancing cost with the reinforcing bar properties, and efficiently using different bar types to achieve optimum life-cycle performance.

About the Presenter:

Harry White earned a BS in Civil Engineering from Union College in 1992. He started his career with NYSDOT and earned his PE four years later. For ten years he worked in the Standards Unit, three years as the Unit Head, creating the Bridge Manual, Bridge Detail Sheets and numerous Engineering Instructions, Engineering Bulletins, and Specifications. During his time in the Standards Unit, he investigated the Department's use of various reinforcing bar types. Today's presentation is the result of that investigation.
Synopsis:

A 95-m long (310’) skewed Warren truss that carried a “Principle Urban Arterial” over the Seneca River/Barge Canal at Belgium, NY since 1949 was dismantled, shop rehabilitated, and re-erected over the Barge Canal at Plainville, NY. The old Belgium Truss Bridge, which spanned the Historic Barge Canal and was a contributing element to the Historic Canal District, was replaced with a new steel multi-girder bridge with a determination of “No Adverse Effect”. This project was the first to utilize the Canal Bridge Programmatic Agreement developed by SHPO, FHWA, and NYSDOT. Rehabilitation versus replacement alternatives were considered following the established hierarchy of the programmatic agreement. The former Belgium Bridge over the Canal was dismantled, rehabilitated, and re-erected on a “rural collector road” crossing the Canal at Plainville, NY. The rehabilitated truss was constructed on a new alignment and replaced the existing single lane historic truss bridge at Plainville.

The presentation will describe the alternatives investigated; explain why the truss was re-used; the construction processes involved in the relocation; the construction issues associated with a project of this nature; and the real costs of the project realized throughout construction. The project serves as a good litmus test for future bridge replacements over the Historic Canal using the Canal Bridge Programmatic Agreement. The presentation will include a segment comparing the actual cost versus a new bridge replacement. Discussion regarding the overall cost-effectiveness of the project will be pursued. If clear, beyond doubt, that the project was not economically viable (due to actual cost and quality of product) then we might propose to our peers a legislative initiative to get certain preservation laws for historic bridges and bridges determined to be contributing elements to historic district amended.
About the Presenters:

**Kurt Bower** received his ASES from Brome Community College in 1988 and his BSCE from the University at Buffalo in 1990. Kurt has been with the State DOT for 15 years and is a licensed Professional Engineer in New York. Kurt spent 7 years working in a highway design squad and 5 years as a Consultant Design Manager, of which he oversaw the preliminary and final design of the Route 31 project. Kurt started out on this construction project as the Office Engineer and is currently the Engineer-in-Charge.

**Tom Siwula** graduated from Texas A&M University in 1978 with a BSCE and has been involved with track and bridge design, construction, maintenance, and inspection for 27 years. Tom has been a member of AREMA since 1982 and ASCE since 1990. Tom’s past employers include Missouri Pacific Railroad, Union Pacific Railroad, and Konski Engineers. Over the past 6-years, Tom has worked for C&S Engineers providing design services for bridge rehabilitations and replacements. In his current position, Tom enjoys a peer relationship with 12 bridge design engineers on staff at C&S and the flexibility they offer for completing bridge design assignments.

**Tom Horth** received his AAS in from Mohawk Valley Community College in 1996 and a BSCE from Clarkson University in 1998. Tom has been with C&S Engineers for the last seven years, where he has been involved with a variety of bridge rehabilitation and bridge replacement projects. He is a licensed Professional Engineer in New York, and is currently a Project Engineer with C&S. He has been an active board member of ASCE, where he served as President from 2004-2005.
Quality Assurance is defined as meeting the expectations of internal and external customers for error free products, services and business processes through continuous improvement. Properly administered quality assurance ensures that replacements, additions, and rehabilitations of infrastructure elements are designed and constructed in accordance with the contract documents and engineering standards. Quality Assurance is an ongoing management responsibility which involves planning and implementing systematic actions to assure work processes and designed elements are functioning as intended. A properly implemented QA program will eliminate construction delays, reduce costs and change orders, and ensure that the project meets State and Federal guidelines.

About the Presenter:

Paul Rimmer received his B.S. degree in Marine Sciences from LIU at South Hampton before receiving his B.S. in Civil Engineering from SUNY Buffalo. Paul accepted a position at the NYSDOT Structures Division in August 1983. He then transferred to the Metals Engineering Unit in 1987 and was appointed supervisor in 2001. Paul has been involved in committee work with many organizations including the National Steel Bridge Alliance, American Welding Society, TRB National Institute of Steel Detailers, NCHRP.