

Bridges: Rating
Inspection
Replacement
Design
PS & E
Construction Supervision

Buildings: Inspection
Rehabilitation
Design
PS & E
Construction Supervision

Parking Ramps:
Rehabilitation
Replacement
Design
PS & E
Construction Supervision

Signs & Signal Structures:
Inspection
Replacement
Design
PS & E
Construction Supervision

Civil: Highways; Streets; Earthwork; Drainage; Water/Sewer Design; PS & E; Construction Supervision

Traffic: Site Impact Studies for Housing Developments, Shopping Centers, Industrial Parks, Banks, and Fast Food Restaurants; Traffic Signals; Parking Facilities; Security Systems; Traffic Safety; Accident Investigation and Reconstruction; Traffic Operations

Environmental:
Urban Designs; Site Impact studies for Shopping Centers, Industrial Parks, Housing Developments, Banks and Fast Food Restaurants; Parking Facilities for Parking Lots and Parking Ramps

Grants: Traffic Safety
Traffic Engineering
Traffic Design
Bridge Rehabilitation

Legal: Accident Prevention & Safety Inspections

Accident Investigations

- Automobile/Motorcycle/Truck/Bus/Equipment (including Accident Reconstruction)
- Pedestrian Fall downs/Building Code Violations
- Construction Claims/Traffic Control Plans (TCP's)
- Highway/Bridge/Guiderail/Signal/Intersection Design/Construction/Maintenance
- Snow and Ice Maintenance
- Computer Fraud & Misrepresentation
- Mechanical Defects/Safety
- Seat Unit/Seat Belt/Air Bag
- Structural Failures
- Electrical Mishaps

Court Presentation & Reports

Expert Testimony

Accident Animation & Accident Simulation, Photogrammetry

2000 Partial Client Reference Listing

New York State Department of Law (Assistant Attorneys General) *

Buffalo Offices Richard Friedfertig Greg Miller Paul Volce Wendy Morico
716-853-8400 Russell Ippolito, Jr. (frmr ECA)

Albany Offices Bruce Feldman Joe Peretta
518-474-4959
518-459-5836 Bernard Schachne (now in private practice)

Binghamton Offices Dennis McCabe Earl Gialanella
607-773-7823

Rochester Offices Reynolds Hahn Tom Ramsey
716-546-7430

US Assistant Attorney Generals * Lynn Edelman 716-885-7064 Steve Bachinski
716-551-4825

Erie County Attorneys Offices *
716-858-2220 Kristen Klein-Wheaton Alisa A. Lukasiewicz Thomas Kirkpatrick
716.858.2225 Charles Sawyer Andrew Isenberg George Zimmerman
716.886.5758 Susan Bring-Tobe (frmr NYSAAG and ACA)

Westchester County Attorneys Offices * **Monroe County Dept of Law**
914-285-3740 Syma Funt John C. Hunt 585-753-1433 Howard Stark ACA

Oxman, Natale, Friedman, Geiger & Tulis Stuart Kahan *
914-741-6200

Levene, Gouldin & Thompson, L.L.P.
607-763-9200
Philip Johnson John Perticone *
Binghamton, NY

Louis Seigel, P.C.
716-854-2626
Buffalo, NY

Rosenblum, Kessler & Sarachan, P.C.
518-464-0444
Mike Kessler George Sarachan
Sandy Rosenblum Bruce Sutphin
Albany, NY

Hurwitz & Fine, P.C. *+
716-849-8900
Dan Kohane Sheldon Hurwitz Paul Suozzi
Jeffrey Baase
Buffalo, NY

Jaeckle, Fleischmann & Mugel, L.L.P. *
716.843.3811
David Brock
Buffalo, NY

Defilippo Brothers
607-734-8177
Frederick Defilippo Steven Proudfoot
Binghamton, NY

Hinman, Howard & Kattell, L.L.P. *+
607.723.5341
James L. Chivers James F. Lee
Binghamton, NY Al Millis Kim Kostun

Travellers Insurance *
607-748-4678
Bob Michelle, Esq.
Binghamton, NY

General Accident Insurance *
518.464.8316
Edward Fassett
Albany, NY

Zweibel, Brody, Gold & Fairbanks, P.C.
800-696-3481
Allen Zweibel Majer Gold Jon Fairbanks
Newburgh/Albany, NY

Ainsworth, Sullivan, Tracy & Knauf
518.474.8415
Albany, NY Carolyn George

Ralph Lewis, P.C.
518-943-6667
Catskill, NY

1993 to Present Partial List of Clients

The LA Group

Landscape Architects, Architects and Engineers

518-587-8100

Jeff Anthony, President Holly Elmer Dean Long Rick Weber

Saratoga Springs, NY

Engineers and Geologists
518-674-8417

George C. Marshall and Associates Jeff Lang, Senior Engineering

Geologist

Averill Park, NY

North Country Engineering

Structural Engineers

518-668-4522

David Klein, President

Lake George, NY

Rist-Frost Associates

Engineers and Land Planners

518-793-4141

Tom Yarmowich, P.E. Dave Barrass, P.E.

Glens Falls, NY

Richard Jones Associates, P.C.

Architects

518-793-1015

John Goralski, L.A.

Queensbury, NY

Tom Green

Green's Appliance Store and Development Co.

518-456-6325

Albany, NY

The Saratoga Associates

Architects and Land Planners

518-587-2550

Robert Bristol, R.L.A. Steve Husky, P.E.

Saratoga Springs, NY

The New York State Department of Transportation

The Maryland Department of Transportation

The Massachusetts Department of Transportation

The City of Springfield, Massachusetts

Queensbury Town Planning Department

Accident Reconstruction Training and Experience

Mr. Levine has been involved in the field of Traffic Accident Investigation and Reconstruction since 1975. Before forming his own firm in 1982, he was heavily involved in traffic accident investigation and reconstruction report preparation for the principals of various firms including Wallace-Champagne Associates, Greenman-Pedersen Associates, and Champagne Associates. During this time period, Mr. Levine did not appear as an expert in court. After 1982, Mr. Levine continued to investigate and reconstruct accidents and began appearing in court as an expert both for the plaintiff and defense council. A partial listing of clients is attached.

Mr. Levine has advanced training in Accident Investigation and Reconstruction as offered by Northwestern University, George Washington University, Rensselaer Polytechnic Institute, The Institute of Traffic Engineers and The Society of Automotive Engineers. In addition, he has completed course work related to vehicle mechanical system investigations (Rudolf Limpert), computer applications (both CADD and Reconstruction) including EDVAP training. Utilizing his highway design and construction background, he has fully integrated computer application technologies with accident investigation and reconstruction field experience to prepare court presentations using computerized drawings and reconstruction software. The firm has total CADD system capabilities to prepare presentation materials ("E" size drawings, slide presentations, animation, and models).

Together with associates of the firm, Mr. Levine provides a full range of accident reconstruction and investigation specialists. A team approach is used many times to best utilize the talents and experience of the firm associates. Accident causation and defect analysis for cases involving heavy equipment, truck, bus, and off-road vehicles, platform lifts, forklifts, crane and cherry picker, motorcycle and automobile are routinely performed.

Mr. Levine is a member of the Institute of Traffic Engineers Expert Witness Council, The National Association of Professional Accident Reconstruction Specialists and The Society of Automotive Engineers.

Highlights of Typical Legal Services

Accident Reconstruction

Lawrence M. Levine, P.E., Consulting Engineers provide clients with a well rounded team of experts in Traffic Accident Reconstruction including computer aided reconstruction techniques (Damage Profile vs. Speed Determination, Vehicle Defect Determination, Conservation of Momentum, EDVAP, Real Time Driver's Eye (or other) 3-dimensional views and Real Time Accident Animation). The design, construction and maintenance of the highway itself are an integral part of the accident reconstruction.

Cause and Cure investigations include to bridge, road and building design and/or construction defects, structural failures, contract claims and other phases of Civil Engineering, Mechanical Engineering and Electrical Engineering are regular assignments.

Products Liability

Working with in-house associates, Lawrence M. Levine, P.E., Consulting Engineers has been able to coordinate the expertise and abilities of many experts in a variety of products liability cases. Typical cases involve machine failures and/or lack of proper safeguards and/or improper design. They range from injuries due to improper packaging or assembly of cigarette lighters to improper design of hydrostatic transmission systems on pavement rollers.

Contract Claims

Either in defense of owner's contractual rights against unfair claims or by helping a contractor in trouble due to overruns, contract oversights, or unfair contract administration, Lawrence M. Levine, P.E., Consulting Engineers can assist owners and contractors in court or arbitration.

Design Inspection Services

Architectural plans are prepared in-house by our building engineers and architectural staff. Whether it be a gymnasium, a house inspection, pedestrian and highway bridge, roof design or inspection, a ball field or an office building, Lawrence M. Levine, P.E., Consulting Engineers work in close coordination with the client to keep projects on track, on time and cost-effective.

Resume

Lawrence M. Levine, P.E., Principal

Mr. Levine obtained a Bachelor of Science Degree in Civil Engineering from Michigan State University in 1974 and a Master's Degree (MTE) in 1975 at Rensselaer Polytechnic Institute. While in undergraduate school, Mr. Levine was employed as a Junior Engineer for a Civil Engineering and Land Surveying firm. His duties included construction inspection of large buildings, utility, site development and roadwork projects. Other duties included design drafting, land surveying, property searches, layout work, pile-driving counts and reports, sidewalk and asphalt concrete paving projects.

Shortly after graduation, he was employed as a Junior Engineer with the New York State Department of Transportation, Region I, responsible for preparation and draft of planning statements and reports, major corridor studies and accident evaluations for Upstate New York.

During his graduate studies at Rensselaer Polytechnic Institute, Mr. Levine became heavily involved in basic research to improve access for handicapped and elderly to transportation systems. He was employed throughout his graduate studies by the Rensselaer Research Corporation and prepared a project study over 500 pages in length including original computer transit planning programs, design criteria and standards for handicapped and elderly transportation for the Buffalo, New York Light Rail Rapid Transit Project.

Since graduation, Mr. Levine has undertaken post-graduate studies including seminar course work in Accident Investigation and Reconstruction, Signal and Roadway design, expert testimony, property development and environmental law. Mr. Levine's professional career includes over twenty years of experience in the civil engineering, transportation planning and traffic engineering fields. He has worked as both engineer-in-charge and principal project engineer on a broad spectrum of engineering works including numerous civil design and construction projects, TOPICS studies, Bridge and Highway Maintenance/Rehabilitation, Environmental Impact Studies, computer design for transportation and structural projects, traffic circulation and parking studies.

As an Associate Engineer and Project Manager for other firms, Mr. Levine was involved with numerous engineering projects and studies including Islip and Babylon, Long Island TOPICS (over 175 signalized intersection designs), downtown circulation and parking studies in several large metropolitan areas, large and small shopping center designs, downtown and regional traffic projections and design studies, major route studies, highway, bridge and building design, construction and maintenance projects, computerized traffic signal system design, development of computerized structural design programs, major signing projects, major road closings, small and large traffic generator designs, development design and accident investigations and reconstructions. Mr. Levine has worked on large and small traffic generator designs, intersections design projects, structural design projects, and provided expert testimony and reports for literally hundreds of accident investigation cases.

He has been involved with the investigation, analysis, reconstruction and report preparation for vehicular, pedestrian, structural accident investigation cases. He has testified in the Court of Claims, and Supreme Courts throughout New York State as an expert. He has take coursework at Northwestern, George Washington, and RPI as well as seminars through SAE, NAPARS, and ITE related to construction safety and accident reconstruction.

Mr. Levine was Project Engineer on large regional access and downtown circulation studies performed for the City of Springfield, Pittsfield, Troy, Albany and Catskill, areas in New York City, and adjacent locales. Current projects include a complex housing development project, a large regional shopping center development, and several bridge and overhead sign projects. For each of the above projects, Mr. Levine is in charge of total coordination and design functions working directly for the developer and/or agency involved. During the course of each project, he has testified, when required, before public boards and at public hearings.

Most recently, Mr. Levine has partnered with Monarch Design Group LLC to provide full service Engineering, Architectural, Landscape Architectural, Structural, Hydraulic, SEQR, Traffic Engineering and Civil Engineering services, as well as surveying, estimating, construction inspection and management. The firm is currently involved in many large and small building projects including the V-Corners Shopping Center, High rise apartment complexes, Subdivision design and construction and downtown renovation and green energy LEED projects for the new Nanotechnology Park in Malta, New York.

Mr. Levine has taught courses in surveying and engineering economics while at Michigan State University, and courses in current research techniques for engineering design and traffic engineering at Rensselaer Polytechnic Institute. He is a Registered Professional Engineer in New York State and New Jersey. Mr. Levine is a member of the Institute of Transportation Engineers, NSPE, ASCE, SAE, NAPARS, and a member of Chi Epsilon Engineering Fraternity. Mr. Levine has authored a chapter in the ITE reference text "Expert Witness Manual", a text used in house by the Investigators of the Attorneys General Office of New York State (presented for a course sponsored by the Office of General Services) regarding Accident Investigation and Reconstruction as they relate to Highway Design, Construction and Maintenance, and Computer Models and Manuals for the Design of Large Highway Sign Support Structures and for the Design of Spanwire and Mast arm Signal Design structures (used by the State of Maryland and elsewhere).

Employment Record

2008 to Present

Monarch Design Group LLC Partnership

Consulting Engineers and Landscape Architects in private practice. Civil and Building projects include shopping centers, large and small subdivisions and multi-family housing, high rise apartment complexes, ski resort facilities, green energy LEED building designs for office buildings and retail centers, construction inspection and management, traffic engineering, highway design and construction, Environmental Impact Studies, structural inspections, general highway, building, and bridge maintenance, construction and design, and CADD applications.

1982 to Present

Lawrence M. Levine, P.E., Consulting Engineers

Consulting Engineer in private practice. Engineering projects include subdivision and multi-family housing, shopping center design and construction management, traffic engineering, highway design and construction, Environmental Impact Studies including noise analyses, structural inspections, general highway, building, and bridge maintenance, construction and design, and CADD applications. Forensic engineering for attorneys including the New York State Attorney General's Office and private firms to determine and/or investigate causative factors for construction claims, highway accident litigation, structural failures, work zone protection, etc. (see Supplemental Training and Experience)

International Software Sales, Inc.

Partner in a computer company producing software for engineering and business applications - traffic accident reconstruction, sign structure design and construction, foundations, project management and accounting. Software has been favorably reviewed by national magazines (80-Micro, Two/Sixteen). He has presented papers on engineering application programs (structural, etc) before various professional groups (part of the ITE Educational Foundation Course on Micro-Computers for Engineers). He has presented seminars for MATAI, NAPARS and NATARI related to accident reconstruction and highways.

Affiliations

Professional membership in National and New York State Professional Engineering Society, American Society of Civil Engineers, Institute of Transportation Engineers, Society of Automotive Engineers, NAPARS, Chi Epsilon Civil Engineering Honor Society. He has held several offices and has received awards for participation. He has written articles and presented original research and design materials later published as part of professional level course work by ITE and ASCE. He served as Program Committee Chairman for the New York State P.E. Week for two years. He has presented short courses in highway design, structural design, surveying, engineering economics, computer applications for accident reconstruction, and expert testimony.

Licensure

New York State as Professional Engineer and New Jersey as Professional Engineer.

1978 to 1982***Champagne Associates, P.C., Consulting Engineers***

Employed originally by firm founder as second engineer with company. Projects he was in charge of or principal engineer included: traffic signal design/construction, subdivision design layout/EAF preparation, large and medium sized shopping mall design/EAF, EIS preparation, highway design/construction work zone (TCP) layouts/construction inspection/EIS preparation, traffic impact and accident analysis for traffic generators, traffic studies and inventories for communities with documentation for grant applications/funding, cost estimating for all the above, accident reconstruction, computer planning/signal timing/accident reconstruction (TNET, CRASH/SMAC, THANSYT, SIGOP), accident investigation and reconstruction, work proposals, client negotiations, testifying before public boards, APA, DEC, and governmental agencies, plans/specifications and/or reports for all of the above projects.

1976 to 1978***Greenman-Pedersen Associates, P.C., Consulting Engineers***

Joined firm through merger with Wallace-Champagne Associates retaining position as project manager/engineer. For the first year he continued working in the Babylon Office as head of the Islip TOPICS team under direct supervision of Vice President of the company. The work included: TOPICS, TOPICS related and unrelated projects in New York, Maryland, Massachusetts and Vermont including: analysis/design/coordination of construction (12) of 175 plus intersections, travel corridor and route studies, downtown parking and circulation studies, urban revitalization studies (malls), large shopping center design/construction, design/construction of parking garages, school playgrounds and ballfields, lighting facility design, hospital design, accident investigation and reconstruction.

1975 to 1976***Wallace-Champagne Associates, Consulting Engineers***

Joined firm as Project Manager for transportation projects throughout New York State, Massachusetts, Vermont and Maryland. Projects included: strip mall and major shopping mall design and construction (Latham Corners, Colonie Center Expansion, Springfield Downtown Mall, others), difficult subdivision design/construction (Troy Manor, others), building and playfield design/construction, highway corridor studies/design/construction, large and small traffic studies, municipal and state traffic studies including: Troy, Albany, Catskill, Springfield, and others, traffic studies, trip generation, sign inventories, signal studies (all data acquisition, time and delay, accident and sign investigations and analysis), design/construction of traffic generators including fast food chains (McDonald's, Burger King, Taco Pronto), banks (First American, Troy Savings, National Savings, Home and City), special events, car dealerships, hotels and motels, restaurants, and others.

1974 to 1975***New York State Department of Transportation, Region I, Albany, NY***

Junior Engineer in the Planning Department preparing corridor studies and Project Initiation reports for Routes 2, 4, and 7 in upstate New York, accident evaluations, safety upgrade design proposals, right-of-way evaluations, sight distance and other safety features of each corridor. Full scholarship at Rensselaer Research Corporation (RRC) to develop Annotated Bibliography, Definitions, Trip Generation, Distribution and Modal Split computer models of handicapped and elderly travel for the Light Rail System in cooperation with the Niagara Frontier Transportation Committee (NFTC). Instructor in undergraduate soils, and Intro to Engineering Labs at RPI.

1970 to 1974***Hershberg & Hershberg LS, P.E., Civil Engineering and Surveying, Albany, NY***

For three months each summer employed for surveying, inspection and design draftsman on numerous projects including the South Mall Towers high-rise apartment building, pile-driving inspection for the Old-Age Apartment High Rise structure on Washington Avenue, Albany, NY, sewer and water main installation for Washington Avenue Extension, asphalt and concrete pavements (both new and reconstruction) on several roadway and sidewalk projects throughout the City of Albany.

Awarded Michigan State University Undergraduate Assistantship in Engineering teaching Surveying and Highway Economics.

Elected President of Civil Engineering Honor Fraternity Chi Epsilon.

Founded the Help Room at MSU.

Elected Engineering Representative to the University Curriculum Committee.

Resume of Supplemental Training and Experience

Snow and Ice Highway Maintenance: 1990-1991. NYSDOT/NYSDOL Consulting Contract (\$150,000- item) for preparation of in-house 3-volume document (Not Published) evaluating and reviewing all aspects of snow and ice maintenance including personnel/equipment/training/field testing/operations. Included recommendations for upgrading and maintaining equipment, communications, changing operations, maintenance practices and procedures including training for existing two person plow system and for advent of OPP (one person plowing) by the State. Evaluated effect on plow truck safety relative to center of mass changes, as materials are spread and wing/front plow tendency to spin vehicle. Computer reconstructions of plow truck spin out. Prior training and experience with DOT and local operations and practices through traffic studies and contracts that involved snow and ice maintenance aspects and consulting.

Special Motorcycle Operations and Safety Training: 1996. 8 hours classroom and 36 hours of field motorcycle advanced safety operation and training at Hudson Valley Community College. Field-testing of various tire-stopping capabilities on various bikes. Owner/operator motorcycles and have investigated and reconstructed motorcycle accidents since 1982. NYSTARS, SAE, NW investigation/reconstruction.

Vehicle Rollover Reconstruction and Field Testing: 1997. One-week course including field tests of roll-over to verify classroom reconstructions for tractor-trailer combination, large dump truck, step van and mini-van roll-overs sponsored by Royal Canadian Mounted Police and University of British Columbia by IAARS in Vancouver, BC, Canada. Field testing of child restraint seats, tie-backs and harnesses also.

Engineering Dynamics Computer Simulation and Reconstruction Training: 1986 / 1998. After purchasing the original EDSYS computer accident reconstruction and simulation package from Engineering Dynamics Corporation, two week associated training completed. Additional training completed after purchase of updated package. (EDCRASH, EDSMAC, EDCAD, EDSYS).

VC 2000PC Training: 1997. After purchase of Vericom Braking Test Computer accelerometer, training in use for field testing and determination of drag factor, braking force, coefficient of friction, dynamic friction, static friction, acceleration and deceleration.

Railroad Pre-emption and Signal System Design: 1997. Short course re: design and evaluation of railroad crossings and safety features relative to same sponsored by ITE.

Round-Abouts and Traffic Calming: 1997. ITE course re: design and evaluation of round-abouts and safety features relative to same.

Resume of Supplemental Training and Experience

Pedestrian, Bicycle, and Snowmobile Trail Maintenance, Design and Operations: Several training courses sponsored by ITE, ASCE, DOT and others relating to subject over the years. Involved in design of new trails as well as updating older trails (in particular for use by snowmobiles, cross-country ski operations and bicycles, in addition to pedestrians). Ownership, design, construction, operation and maintenance of trails at Janet's V-Corners (22 acres of trails) since 1986. Layout, design and upgrade of trails including signing and marking for project in Canton, NY on-going with Piro Associates.

IES (Illuminating Engineering Society) Course: 1993. One-week course and later seminars, etc. relating to measurement, determination, interpretation and analyses of lighting for highway and development applications. Use of cosine corrected light meters since 1978 for lighting surveys on and off road applications and design and maintenance studies for lighting applications at shopping centers, parks, urban and rural locations. Meter available in-house.

Noise Impact Study Course: 1986. ASCE sponsored course and later seminars, etc. on use of computer applications and interpretation of results for Noise and Pollution Studies relating to environmental impact analyses and interpreting noise meter results. Use of various methods for measurement since 1982 in-house and involvement in many traffic and noise impact studies (blasting, metal/scrap crushers, highways, noise barriers, plant operations, vehicles and machinery).

"CRASH" Course in Bus Accident Investigation: 1997. One day course sponsored by NYS Police Academy and NYSTARS (New York State Traffic Accident Reconstruction Specialists) in school bus and commercial bus accidents, how to investigate them and techniques in reconstructing. Included field testing and riding in commercial bus, and empty dump truck skid testing including verification of VC 2000 data. 1998. Field testing of acceleration and braking for Saratoga School buses.

NAPARS and MAPAI Pedestrian Accident Course/Conference: 1995. Weeklong courses and field testing relative to pedestrian and bicycle accident investigation and reconstruction. Presented course on computer aided accident investigation and reconstruction focusing on highway factors as proximate causation. Also Basic Highway design and investigation checklists for the investigating Officer.

Accident Investigation and Reconstruction: 1992. One-week course at George Washington University including recap of basic investigative and reconstruction methods and techniques. Special section on Government Crash Test Data including source information and films. Investigation and reconstruction of Air-bag issues. Review of Government testing, design requirements and applications for belts and air bags.

Resume of Supplemental Training and Experience

Advanced Accident Investigation and Reconstruction: 1989. SAE sponsored accident investigation and reconstruction course with Rudolf Limpert focused on vehicle and mechanical aspects of accident investigation including braking, steering, rollover and suspension. 1999. NYSTARS Denis Woods' Advanced Reconstruction Methodologies, crash test film evaluations, and PCCRASH/PCRECT, CRASHEX review.

Bridge Rehabilitation and Inspection: Several courses to update basic engineering training for fieldwork including NYSDOT, FHWA, AASHTO, ASCE sponsors. Project experience to present including inspection, design, signing, marking, painting, jacking, TCP's (Traffic Control Plans) for work zone layout.

SEQRA and Building Code Issues: BOCA and NYS sponsored meeting and seminars by the Building Code Officials through the years. ASCE sponsored seminars. See Project Experience.

Biomechanics of Injury: 1998. CATAIR sponsored course at Brock University relating to injury to impact. Low speed rear impact, seatbelt and airbag, motorcycle, general biomechanics and reconstruction.

Project Related Expertise and Testing: As part of preparation for specific cases, I have obtained special expertise by hands-on experience and training in many other areas including soil and material testing, testing and investigation of light bulb filaments, tire damage, photogrammetry and interpretation of photographs, light meter and sound meter use and applications, pavement mark interpretation, field surveying and topo applications to measurement of vehicle damage, 3-D computer application to vehicle damage interpretation and angle of impact. I have conducted numerous field tests, accident investigations and reconstructions for pedestrian, snowmobile, motorcycle, bicycle, auto, van, truck, tractor-trailer, ATVs, cherry pickers, heavy equipment (dumps, snowplows, wingplows, spinner and dickey john equipment, backhoe, roller, bulldozer, loader, forklift, etc.).

NYS Department of Law Investigators Unit: Presented course for NYSDOL re: accident investigation and reconstruction at NY Training Facilities including preparation of investigation handbook. Advanced techniques of investigation, reconstruction formulae, highway maintenance, design and construction issues and instrumentation available (individual demonstrations of case related use of 3-D CADD, computer reconstruction simulators (PCCRASH, HVE-2D, CRASHEX, AICALC), VC2000 braking computer, photo rectification, database searches.

Acceleration, Deceleration, G-Forces During Maximum Swerve and Braking Tests: Instrumented tests on motorcycle, bicycle, tractor-trailer, large garbage truck, mini-van and passenger cars for the above items. Braking tests are routinely done on unchanged surfaces.

Resume of Supplemental Training and Experience

Highway, Intersection and Bridge Plans in 3-D: Conversion of 2-D plans to 3 dimensions is routinely done along with signs and vehicles in 3-D. Day and night simulation of sight distances and limitations from the driver's perspective within the vehicle, or a witness' perspective are routinely done.

Computer Accident Simulation, Reconstruction and/or Animation: Accident reconstruction based on actual plans, actual field geometry including damage profiles to vehicles and fixed objects (poles, trees, guidedrails, etc.) using graphical solutions, manual application of formulae, visual presentations including model building and photo interpretation including photogrammetry, tire tread identification, and use of court presenter, computer generated driver perspectives using flix/slide presentation in 3-D, through full simulation/animation of even using EDSYS, PCCRASH, CRASHEX.

Traffic Simulation and Capacity Analyses: Using TRAFSIM and HCM programs, traffic patterns, distribution and assignment are analyzed for impact studies.

Overhead Sign, Signal and Lighting Structure Design Programs: Development team leader/programmer of a series of computer programs for the State of Maryland which graphically lays out and then designs components based on AASHTO yellow book design. Accepts most tube shapes available. Developed design workbook and taught short course for ITE.

Highway and Bridge Design, Guardrail Design/Warrants Analyses, Accident Reconstruction Programs, Highway Drainage, Appurtenances, Safety Features and Side Slopes: Partner in computer software design firm ISSI (International Software Sales Inc) since 1983 – programmed, developed and sold programming including manuals and course notes.

Tractor-trailer Operation/Brake Inspection/Vehicle Operation and Accident Reconstruction and Field Testing: 2006. Two-week course including field tests of braking to verify classroom reconstructions for tractor-trailer combination vehicles. Also training regarding hydraulics, air brakes, field inspection and braking operations sponsored by State of Maine Police in Augusta, Maine.

Perception and Reaction Human Factors Class: two-week course including vehicle simulator operation and use of human reaction time in accident reconstruction and proper application of various computer simulations at University of Massachusetts Amherst Campus.

<u>Court Decisions of Interest</u>	<u>Attorney</u>	<u>For</u>	<u>Outcome</u>
Canfield vs NYS (I88 improper guiderail end)	John Perticone	Plt	\$4.5 million
Krent vs. County of Erie (roller hit bridge)	George Zimmerman	Def	Dismissed
Auer vs. NYS (scalloped edge drop)	Michael Kessler	Plt	\$19 million
Jensch vs. NYS Thruway (motorcycle hit joint)	Alan Zweibel	Plt	Award
Gomez vs. NYSTA (snow/ice ramp on bridge)	Mike Cunningham	Plt	Award
Burton vs. NYS (motorcycle on curve)	Richard Friedfertig	Def	Dismissed
Gagnon vs. County of Westchester (pole hit Bronx River Pkwy)	Stuart Kahan	Def	Dismissed
Church vs. Clough Harbour Assocs. (missing guardrail on Thruway)	Dan Tyson	Def	Dismissed
White vs. Peracciny (road rage reconstruction)	Louis Siegel	Plt	Settled
Fike vs. NYS Thruway (tractor-trailer hits backhoe)	Hede Allette	Def	Settled
Barone vs. NYS Thruway (motorcycle hits median barrier)	Gregory Miller	Def	Dismissed
Gerwitz vs. NYS (bicyclist hit on Ontario Pkwy)	Henry Jesserer/James Gocker	Plt	Dismissed
Crary vs. NYS (head-on collision reconstruction)	Wendy Morcio	Def	Dismissed
Schroeder vs. Dees (motorcycle/car collision reconstruction)	Bernard Schachne	Plt	Award
Rurycz/Fitch vs. NYS (intersection signing at night)	Sal Ferlazzo & Edward Ryan	Plt	Award
Beaudoin v Bowman (log Tractor-Trailer loading accident)	Al Millis & Kim Kostun	Def	Dismissed
Hubiak vs. NYS (snow and ice maintenance case)	Richard Bach	Plt	Award
Izydorczak vs. BFI (trash truck involvement in head-on)	David Brock	Def	Dismissed
McLean/Lemons vs. Calanan (wrong-way on expressway ramp)	Seymour Fox	Plt	Settled
Billa vs. NYS (improper curve design/construction)	Dick Horigan	Plt	Award
Rumbaugh vs. NYS (motorcycle edge drop-off during road construction)	Hon. Richard Sise	Plt	Award
Holmes vs. City of Elmira (snow & ice maintenance and intersection controls)	John Perticone	Def	Settled
Brothers vs. Bunkoff Construction (OSHA case involving nail gun)	George Sarachan	Plt	Award
Underwood v NYS (Pedestrian hit by turning tanker)	John Humann	Plt	\$3 million
Newman v Morehouse (Signal intersection case)	Louis Seigel	Plt	\$2 million
Alaskan Oil v Tri-Tank and NYS (Tanker design/Intersection design)	Abe Rychik	Plt	\$1 million

Highlights of Some Typical Projects

Stewart Air Force Base Conversion to Privatize Commercial Airport Facility: All proposed developments, associated I-84/I87 and local route connections, including all review of environmental impact statements, data and analyses, interchange analyses, impact analyses, roadway and design plans for SPARC (The Stewart Park and Reserve Coalition). Sandra Kissman 845-564-3018

WalMart Environmental Impact Statement: Review and testimony including all impact analyses, roadway and design plans for Lake Placid Residents for Responsible Growth. Peter F. Roland, Jr. 523-4411

NYCO Mine Analyses and Testimony: For traffic study/noise study and environments studies review including all impact analyses, roadway, bridge and site plans in Essex County. Peter Bauer Residents' Committee to Protect the Adirondacks. 518-251-4257 (phone/fax)

Excelsior Park (New Downtown Project at I-87, Exit 15W): Including testimony for traffic study/noise study and environmental studies review including all impact analyses, roadway, interchange and site plans in Saratoga Springs, NY - Saratoga Citizens for Responsible Growth

IDA Industrial Park Roadways/Parking/Circulation/Intersections: Including testimony for economic development council for entire Town of Moreau, NY. Ken Green, EDC, Saratoga Springs, NY.

Atrium Medical Complex (Condominiums): Design plan, specifications, construction management for large 3-story steel, masonry and glass structure, 8-units. Rte. 55, Pawling, NY.

Gas Station Conversion to Strip mall Shops: Including design plans and specifications, construction management, septic tank design and site cleanup. Pawling, NY.

Downtown Troy Historic Warehouse Building Conversion: Design plans, specifications and construction management for large 6-story building to use as stores, offices and apartments including HUD applications.

Troy Manor Subdivision Design: Plans, approvals, bids and construction management including all roads and infrastructure (177 units) on a difficult mountain site laced with springs and expansive clay.

Highlights of Some Typical Projects

Krent vs. County of Erie: Accident investigation and reconstruction of pavement roller on flatbed that struck a railroad bridge. The roller broke free and was caused to shift and roll over by skewed bridge onto a vehicle in the opposing lane. Construction, maintenance, paving core sampling and traffic control elements were analyzed. Computer simulation, full-scale model of bridge damage, testimony for Count of Erie Defense. George Zimmermann, ACA 716-858-2225.

Auer vs. NYS Department of Transportation: Accident investigation and reconstruction for vehicle forced off roadway encountering a shoulder that broke up due to maintenance issues. Vehicle swerved across road, struck two trees and missed a third, ending up on its side down a slope. One tree intruded into rear passenger compartment causing sever brain injury. Seatbelt defense overcome. Involvement both liability and damages portion of trail. Survey/3-D site, vehicle and occupant computer reconstruction, court presentations, testimony for Plaintiff. Michael Kessler 518-464-0444.

Burton vs. NYS: Motorcycle accident in the Indian Reservation involving guiderailing, curve design/construction/maintenance and reconstruction of motorcycle operator actions from injuries, damage and markings on pavement and shoulder. Survey/3-D site, vehicle and occupant computer, court presentations, testimony for Defendant State of New York. Richard Friedfertig, AAG 716-853-8472.

Church vs. Clough Harbour Associates: Single vehicle run off the road accident on NYS Thruway where twisted guiderail end section of guiderail vaulted vehicle. Design/construction/maintenance and reconstruction of vehicle path and operator actions from injuries, damage to vehicle, flight of vehicle and photogrammetry. Contract claim liability, survey/3-D site, vehicle and occupant computer reconstruction, presentations, proximate cause of injury issues. Expert responses for Defendant Clough Harbour Associates, Consulting Engineers. Daniel Tyson, Esq. 518-438-8800 x321.

Schroeder vs. Dee Motorcycle/Passenger Car Head-on: Accident investigation and reconstruction on steep downgrade using damage to vehicles, photogrammetric analysis and injuries to determine the manner in which the event occurred. 3-D drawings, computer and manual reconstruction, court presentation and testimony for motorcyclists. Bernarde Schachne 518-459-5836.

Highlights of Some Typical Projects

Traffic Impact and Traffic Safety Study for a 300 plus acre Heavy Industrial Park in the Town of Moreau, NY for the Saratoga Associates in cooperation with NIMO and the Saratoga Economic Development Council (SECC – Ken Green). Almost all intersections within the town were investigated and evaluated during this extensive study effort. Preliminary design for roadways and three signalized intersections related to the project were included.

Traffic Circulation Study and Plans for the Quaker Square Shopping Center in Glens Falls, NY including all studies and hearings, design and construction management for installation of a new actuated traffic signal. Preliminary investigation of Time-Base Coordination for 10 plus signal system on Quaker Road under construction.

Accident Reconstruction and Investigation (defense) for New York State Department of Law (Albany, Rochester, Binghamton), New York State Thruway Authority, Town of Woodstock, and New York State Department of Transportation on numerous cases including accident reconstruction for motorcycle, bicycle, snowmobile, automobile, truck and pedestrian accidents occurring on roadways, off roadways, bridges, signing, construction, construction management, contract and appropriation matters.

Accident Reconstruction and Investigations for Private Law Firms (defense and plaintiff) in numerous cases, including accident reconstruction for motorcycle, bicycle, snowmobile, automobile, truck and pedestrian accidents occurring on roadways, off roadways, bridges, signing, construction, construction management, contract and appropriation matters. Many other cases involved manufacturing defects (vehicle, machine, products), pedestrian fall down, building construction defects, roofing, drainage problems, loading docks and lift trucks (manual, platform, bucket trucks, forklift).

Traffic Study and Testimony at Hearings for DEC, and others regarding traffic impacts, noise impacts and roadway structural capabilities for private developers and quarry operations at Peckham Materials, Easton, NY site.

Design Review, Traffic Study Review and Testimony at Hearings for Downtown Schenectady New York Merchants' Association to critique, correct and improve NYSDOT and City plans for roundabouts and redesign/reconfiguration of Erie Boulevard Commercial Strip including capacity, speed, traffic impacts, noise impacts and roadway safety concerns.

Roundabout, Corridor and Site Studies and Design for Janet's V-Corners Grocery, Pharmacy, Strip Center, and Housing Mixed Use Development (23 Acres) for RAE Development, Ballston Spa, NY including all site studies and development (sewer, water, swipp, layout, building design, and SEQR).

Typical Corridor Traffic Study Projects

For Catskill, NY

Townwide Traffic Study including all major corridors

While with CA in cooperation with CT Male, LML was Project Engineer for large traffic study encompassing all major corridors leading to and from the downtown and for the redesign and new layout for parking, signal timing, pedestrian control and signing and marking. Study included total inventory and projection of traffic and parking for the area.

For Town of Colonie

Old Wolf Road Corridor Study for Facilities Plan

LML, PE in cooperation with Saratoga Associates was Project Engineer for extensive traffic study including total inventory of Old Wolf Road Corridor including airport and industrial park areas to project traffic impacts due to relocation of all town municipal activities, and for analyzing all intersections and I-87 ramp connections within the corridor.

For Colonie Center, Shoppers Park and McDonald's Restaurant

Wolf Road Corridor Study

While with CA, LML was Project Engineer for extensive corridor studies of Wolf Road Corridor including all projection of traffic, intersection capacity analyses and trip generation/land use growth projections. Signal timing and coordination study, speed and delay study, origin and destination surveys.

For King Road Developers, Schenectady, NY

King Road Corridor Study

LML, PE prepared extensive traffic study including accident analyses, speed and delay studies, parking, highway design and utility location studies for King Road Corridor. Land use and traffic growth projections were incorporated and capacity analyses with recommendations for safety and capacity presented to the City. All work was done in cooperation with CDTC and Schenectady.

For Tri-City Mall Assoc.

Route 146, Curry Road Corridor Study

While with CA, LML was Project Engineer for 93 acre major mall proposal. Corridor traffic studies for Rte. 146, the NYS Thruway and I-890 at Exit 25.

Typical Corridor Traffic Study Projects

For Pyramid Corporation (and NYSDOT)

Route 20, Western Avenue Corridor Study Washington Avenue Corridor Study including ramps to Ring Road

While with CA, LML was Project Engineer to review and reevaluate Pyramid Mall proposals and studies. Later CA was contracted to review for Tri-City Mall also. All corridors were inventoried and traffic projected and analyzed for the Albany Pyramid Mall proposal.

For Congress Oil, and also Adirondack Trust Bank, Milton, NY

Route 9 Corridor Study

LML, PE provided extensive corridor study of Route 9 and Route 50 for proposed development considerations. Total traffic inventory, accident study, signal and road condition surveys were made. Trip generation and distribution, capacity analyses and recommendations presented to the Town of Milton.

For Anthony Bradley Corporation, Saratoga, NY

Broadway Saratoga Springs Downtown Corridor Study

LML, PE provided extensive corridor study of Route 9 and Route 50 for proposed development considerations. Total traffic inventory, accident study, signals, road, pedestrian, and parking survey. Trip generation and distribution, capacity analyses and recommendations presented to the Town of Saratoga Springs.

For King Fuels and for Northern Distributing Clifton Park

Corridor Study for Route 9, Wood Road Industrial Park

LML, PE in cooperation with Rist-Frost and LA Group provided complete corridor study for NYS Route 9 and Ushers Road for Wood Road Corridor (Exit 11, north to Exit 12). Total inventory road condition survey, traffic impact analyses, signal and accident study, land use analyses for the development of the corridor, and of the Industrial Park itself.

For Greens Shopping Center, Delaware Avenue, Delmar, NY

Corridor Study for Delaware Avenue from Albany City Line to RR Tracks

LML, PE in cooperation with J. Kenneth Fraser and Edward Boutelle, LS, PE provided a comprehensive land use analysis investigation to determine trip generation and distribution. Corridor activity, traffic impact analyses, signal timing, accident study, speed and delay, and capacity analyses for the corridor and report recommendations to NYSDOT and the Town of Delmar.

Typical Corridor Traffic Study Projects

For American Marina Drydock Facility, Bolton Landing, NY

Corridor Study Route 9

LML, PE provided extensive corridor study of Route 9N through village of Bolton Landing and also boat traffic survey by video technique, accident study, signals, road, pedestrian and parking survey. Trip generation and distribution, capacity time-lapse photography and noise analyses were done to show the Lake George boat traffic both on and off the lake.

For Karner Road Associates, Albany, NY

Old Karner Road and New Karner Road Corridor Study

LML, PE prepared extensive traffic study including accident analyses, speed and delay studies, signal, highway design and utility location studies for Karner Road Corridor. Land use and traffic growth projections were incorporated and capacity presented to the City. Study corridor extended from Washington Avenue Ext. to Central Avenue.

For Toys R Joy Expansion to Shopping Center, Clifton Park, NY

Route 146 and 146A Corridor Studies

LML, PE prepared extensive traffic stud including accident analyses, speed and delay studies, signal, highway design and utility locations studies for Route 146 Corridor. Land use and traffic growth projections were incorporated and capacity analyses with recommendations for safety and capacity were presented to the Clifton Park Planning Board regarding impact analyses and capacity.

The Whiteface Resort Expansion and Hotel Proposals, Lake Placid, NY

Route 86 Corridor Study

LML, PE prepared extensive traffic study including accident analyses, speed and delay studies, signal, highway design for the Corridor. Land use and traffic growth projections were incorporated and capacity analyses with recommendations for safety and capacity were included.

For State of Maryland DOT

Route 2 and 4 Corridor

While with GPA, LML Project Engineer for inventory of corridors, including pavement condition, accident history, counts, traffic projections, stop and delay studies, signal timing program, intersection and roadway recommendations and designs.

Typical Corridor Traffic Study Projects

For City of Springfield, MA

Citywide Traffic Study including all major corridors

While with CA, LML Project Engineer conducted total inventory of all major transportation corridors and links including citywide signal optimization and land use plan for downtown pedestrian mall. All signing and marking and downtown street network analyzed for new land use plan. Recommendations for all downtown streets, all signing, corridor control, interstate and other local connections and bridges, parking lots and pedestrian ways.

For City of Troy

Citywide Traffic Study including all major corridors

While with CA, LML Project Engineer conducted total inventory of city traffic network and control. Recommendations included study of alternate corridor layout with new bridges to downtown and connector Routes.

Project Manager – for NYSDOT, Town of Islip, NY TOPICS

Brentwood-Central Islip Business District

Fifth Avenue and Carleton Avenue Arterials

Route 109 Corridor

Route 110 Corridor

Veterans Highway Corridor

Route 127 Sunrise Highway Corridor

Route 111 Highway Corridor

Total inventory of corridors including all Traffic Engineering and Design features. Land use evaluation, trip distribution and generation analyses, capacity analyses, preliminary through design recommendations, full benefit/cost analyses, some construction coordination and inspection.

Upstate Routes 2,4, and 7 Corridor Planning Studies

While with NYSDOT, LML prepared accident analyses, preliminary planning studies and recommendations for corridors from Troy to Vermont border.

Corridor Studies Within the Corridor Study Area
(prepared since 1989)

For SEDC (Saratoga Economic Development Council) and NIMO

Town of Moreau Industrial Park Traffic Study including Fort Edward

LML, PE in cooperation with Saratoga Associates, SEDC and NIMO prepared a comprehensive traffic study for the study area bordered by Route 4, Route 197, Route 9, Bluebird Road and Fort Edward Road and included corridor studies for the latter Routes within the study area. Land use projections, trip distribution and generation, network traffic impacts and capacity analyses were provided in the FEIS for the Industrial Park Project.

Lawrence M. Levine, PE has provided professional Traffic Engineering Services for private developers within the corridor study area limits. Note that Lawrence M. Levine, PE, Consulting Engineers generally work in cooperative efforts with other consulting firms providing Traffic Engineering expertise and services. The latter traffic studies incorporate many features of a Corridor Study, but were more limited in scope and purpose:

Mount Royal Traffic Study

Shopping Center Traffic Study, Route 9 Corridor done in cooperation with Northfield Design

Great Escape Traffic Study, Route 9 Corridor

Theme Park expansion roller coaster done in cooperation with the LA Group

Tiki Traffic Study, Route 9 Corridor

Restaurant and Lodging Expansion

Northern Distributing Corinth Corridor Traffic Study

Study of existing operations for expansion plans done in cooperation with Rist-Frost Assoc.

Water Slide World Traffic Study, Route 9 Corridor

Theme Park expansion for slides and track done in cooperation with the LA Group

Red Lobster Traffic Study, Route 254 Corridor

New restaurant proposal across from Aviation Mall done in cooperation with Richard E. Jones Assoc.

Palette Quarry Traffic Study, Route 149, Fort Anne

New quarry proposal – including noise study and roadway conditions survey

Rogers Island Traffic Study, Route 197, Ft. Edward/Hudson Falls

New marina facilities, condos, and park proposal done in cooperation with LA Group

Quaker Plaza Traffic Study, Route 254 Corridor

New shopping center and signal design done in cooperation with North Country Engineering

Willow Ponds Country Club & Subdivision Traffic Study

Study of Route 4/Co. Route 12 intersection and corridor; also road condition survey done in cooperation with LA Group

**Summary of Recent Traffic Studies
Circulation, Roadways, and Intersection Design**

Willow Pond Country Club and Residential Development Fort Anne, NY
Circulation, Roadways, Intersections

Oak Brook Commons Apartment Complex Clifton Park, NY
Parking, Circulation, Intersections

Downtown Design Center in the Pompeii Building Saratoga Springs, NY
Parking, Roadways, Pedestrian Ways, and all connecting downtown signals and roadways

Clifton Commons Recreation Complex Clifton Park, NY

Malta Diner and Office Complex Malta, NY
Parking and Roadways

Waterslide World Expansion Lake George, NY
Parking, Circulation, Roadways, Intersections

Center Office Park Subdivision Delmar, NY
Circulation, Roadways, Intersections

Janet's V-Corners Garden Center/Gift Shop/Café Complex Ballston Spa, NY
Roadways, Buildings, Intersections

Cooper Optical and Medical Complex Saratoga, NY
Parking, Roadways

Center Park Apartment Complex Delmar, NY
Parking, Roadways

Whiteface Inn Resort Complex Lake Placid, NY
Parking, Roadways

IDA Industrial Park Town of Moreau, NY
Parking, Circulation, Roadways, Intersections

**Summary of Recent Traffic Studies
Circulation, Roadways, and Intersection Design**

Colonial Woodland Subdivision Delmar, NY
Roadways, Intersections

The Manor at Troy Heights Subdivision Troy, NY
Entire project design and construction management

Medical Office Building Complex Pawling, NY
Building Redesign, Construction Management, Parking, Roadways, Intersections

Town of Colonie Office Complexes Town of Colonie, NY
Parking, Circulation, Roadways, Interchanges, etc.

Northern Distributors Distribution Centers Glens Falls and Clifton Park, NY
Parking, Roadways, Intersections

Light Industrial Park Clifton Park, NY
Parking, Roadways, Intersections, Ring Roads, Lot Optimization

Rogers Island Recreational and Archeological Park Fort Ann, NY
Parking, Circulation, Roadways, Intersections

Kings Point Subdivision Schenectady, NY
Intersections, Reconstruction of existing streets

Adirondack Trust Bank Sites Saratoga Springs and Wilton, NY
Parking, Circulation, Roadways

Congress Gas & Oil Shopping Center Saratoga Springs, NY
Parking, Circulation, Roadways, Intersections

Quaker Square Shopping Center Queensbury, NY
Parking, Circulation, Roadways, Signal Design, Construction Management

Super K-Mart Plaza Glens Falls, NY
Parking, Roadways

**Summary of Recent Traffic Studies
Circulation, Roadways, and Intersection Design**

Ancillary Road Design/Layout for Charles Woods (across from Pyramid Aviation Mall) Glens Falls, NY

Toys R Joy Shopping Center Expansion and Redesign Clifton Park, NY
Parking, Circulation, Roadways, Intersections, Lighting, Signing and Marking

Bella Vista Strip Shopping Center Niskayuna, NY
Parking, Circulation, Roadways, Intersections

Colonie Center Expansion Colonie, NY
Parking, Roadways, Lighting

Pyramid CrossGates Mall Albany, NY
Ring Road and Fly-Overs

Latham Circle Mall Expansion Latham, NY
Raised Parking, Circulation, Roadways, Intersections, Ring Road

Springfield Downtown Mall and Entire City Springfield, MA
Parking, Circulation, Roadways, Signal System and Signing

Mount Royal Shopping Center Lake George, NY
Parking, Circulation, Roadways

Grand Union SuperCenter Plaza South Glens Falls, NY

Great Escape Theme Park
Parking, Roadways

Tri-City Mall Colonie, NY
Parking, Circulation, Roadways, Intersections, Interchanges, etc.

Bethlehem Plaza Shopping Center Delmar, NY
Parking, Roadways