

**Louis D. Rubenstein, PE, F.ITE**

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**Key Accomplishments:**

1. Serve on Institute of Transportation Engineers committee that reviews proposed changes to the Federal Manual of Uniform Traffic Control Devices (MUTCD).
2. Upgraded barrier railing, and reconfigured striping on Shoemaker Bridge, resulting in significant reduction in accidents and injuries.
3. Led pre-proposal studies for Gerald Desmond Bridge replacement design/build requirements.
4. Proposed and implement three lanes up/two lanes down configuration on Gerald Desmond Bridge, which reduced delays and accidents.
5. Led agency coordination tasks for planning, design, and construction of SR-47 Heim Bridge Replacement.
6. Coordinated agency activities with Caltrans in programming federally funded projects. Organized agency Disadvantaged Business Enterprises Program. Prepared Caltrans, MTA, and California Transportation Commission grant applications. Provided traffic engineering support on 710 freeway extension relinquishment project.
7. Investigated several injury intersection collisions, developed remediation plans. Designed striping and signing for many intersections.
8. Managed roadway development for \$260 M marine terminal. Prepared "Transportation Plan" obtained approval by community and permitting agencies. Directed design of roads, traffic control system, and award of construction contracts. Supported construction activities.
9. Developed Advanced Traveler Information System to reduce queuing near mainline railroad tracks with many long unit freight trains. Developed CCTV application for incident verification.
10. Managed program reorganizing street names and guide signs system. Two earlier attempts were not implemented. Received "Award of Excellence," American Association of Port Authorities
11. Reduced congestion, safety, and queuing problems, by design of roadways and parking lots, traffic signs, and signals.
12. Managed agency special permit overweight vehicle program.
13. Served as the technical advisor for development of the California "Traffic Engineer" license exam.
14. Measured air resistance of freight trains, which hastened development of the national intermodal rail freight system.
15. Received NASA Award for contributions in developing digitized TV image compression for verification of freeway traffic incidents.
16. Led FTA sponsored investigations of public transit operating costs, research and development budgeting process, and lower cost construction techniques, developed engineering design guides for fare collection systems used in several public transit systems and for self-ventilating highway tunnels. Developed two stage queuing models for fare collection system operations.

17. Directed, initiated, and implemented national award-winning bikeway demonstration program for New York City. Led community approval process.
18. Organized seminars in corrosion-resistant concrete design for consultants and several local and state agencies.
19. Managed first USDOT sponsored urban goods movement project. Organized participation process for local business. Implemented enforceable truck priority street system which reduced travel times by 40%.
20. Represented agency at metropolitan planning organization. Doubled amount of technical study funds received by agency.
21. Served as Night Mayor of New York City.
22. Hold U.S. Patent #3,686,627 " Toll Booth System"
23. Directed projects leading to implementation of HOV lanes, park and ride lots, and improved parking enforcement. Conducted traffic impact analyses of major developments.
24. Negotiated cooperative agreements for no charge publication of bus maps.

### **Work History:**

2013- Present Carl Berkowitz Associates, Research Associate  
2008 – 2019: City of Long Beach, Long Beach California, Traffic Engineer Consultant  
1987 – 2007: City of Long Beach; Long Beach California, Senior Traffic Engineer - Traffic planning, programming, operations, and design. Manager Traffic Engineering  
1978 – 1987: Jet Propulsion Laboratory; Pasadena, California, Transportation Systems Engineering Studies  
1971 – 1978: New York City Department of Transportation, Director Intermodal Transportation Studies

### **Education:**

1. *New York University Tandon School of Engineering*  
Master of Transportation Planning and Engineering, 1975
2. *City College of the City University of New York*  
Master of Mechanical Engineering, 1969  
Bachelor of Mechanical Engineering, 1965

### **Continuing Education:**

1. Northwestern University, "Crash Investigation 1,2", "Vehicle Dynamics", "Traffic Cash Reconstruction I"
2. University of Wisconsin, "Fundamentals of Electric Rail Vehicle Systems"
3. University of Wisconsin, "Railroad Crossing Safety"
4. Contractor Certification, "FRA Bridge Worker Fall Protection"
5. AREMA, "Design and Construction of Highway/Railway Grade Crossings"
6. UC Berkeley, Institute of Transportation Studies; "Improving Safety of Railroad Crossings and Light Rail Systems", "Roadway Lighting Design", "Public Works Contract Law," "Traffic Signal Design," "Reengineering Federal Aid Transportation Projects," "Work Zone Traffic Control", and Context Sensitive Design..
7. Dale Carnegie Training, "Effective Speaking and Human Relations"
8. Jet Propulsion Laboratory, Certificate in Task Management
9. Kerzner, "Approach to Project Management"
10. Georgetown University, "Railroad Signal Systems" and "Effective Written Communications"

11. Federal Highway Administration, "FHWA Roadway Departure Technology Roadside Safety Systems", Using the National ITS Architecture," "Urban Transportation Planning Systems," and "Bicycle and Pedestrian Design"

**Registration:** Professional Engineer - Ca.: Traffic, Civil, Mechanical

**Professional Affiliations:** Institute of Transportation Engineers (Fellow), contributing member to committee reports on: "Transit Station Access", "Communications for Traffic Signal Systems", and "Traffic Signal Lamp Standard". American Society of Mechanical Engineers, former member Transportation Research Board committees on Urban Goods Movement, and Bicycling.

**Scholarly Publications:**

1. "Maximum Locomotive Horn Warning Time for Pedestrians before Applying Passenger Train Emergency Brake." Presented at 2023 Joint Rail Conference.
2. "Passenger Railroad Facility Safety Audit As Revenue Protection," Proceedings of the 2015 Joint Rail Conference, March 23-26, 2015, San Jose, CA, USA, Joint Author
3. "Port Operations, Talking Freight Seminar," Federal Highway Administration, June 2004
4. "Passenger Car Equivalents for Trucks," ITE District 6 Regional Meeting, June 2004
5. "Signing Systems: Directional, Identity, and Graphic Systems for the Port of Long Beach," M. Deasy, W. Hunt, L. Rubenstein - Ports'92 - pubs.asce.org
6. "Communications for Traffic Control Systems", Final Report, Committee 7s-^, Institute of Transportation Engineers, 1986, Contributing Author
7. "Concentrations of Exhaust Emissions Inside a Series of Highway Tunnels," Proceedings of the 5<sup>th</sup> International Symposium on the Aerodynamics and Ventilation of Highway Tunnels", British Hydromechanics Research Association, Cranfield, Bedford, England , 1985, Joint Author
8. "Incident Verification with Digitized TV Image Compression," Transportation Research Board, 1985, Joint Author
9. "Vehicle Speed-Time Profiles on Urban Arterials," Jet Propulsion Laboratory, JPL Report D-1654, 1984
10. "Battery Information and Collection Programs for Electric Vehicles," JPL Report D-1835, 1984, Joint Author
11. "Tandem Toll Collection Systems", Transportation Research Record 905, 1983
12. "Wide Area Detection System for Freeway Surveillance," JPL Publication 83-15, 1983, Contributing Author
13. "Gravity Assisted Rail Transit," JPL Publication 82-106, 1984, Contributing Author
14. "Transit Station Access", University of California, Institute of Transportation Studies, UCB-ITS-P-82-1, 1981
15. "Reliability of Rail Transit Fare Collection Systems", Transportation Research Record 760, Transportation Research Board, 1980
16. "Methodology for Urban Rail and Construction Technology Research and Development Planning", JPL Publication 80-83
17. "Overview of Escalator Applications in Rail Transit," JPL Publication 80-76
18. "Manhattan Garment Center Urban Goods Movement Study," New York City Transportation Administration, National Technical Information Center PB 81-109 241

19. "Applications of Consolidation Toward Improving Urban Goods Movement,"  
"Proceedings of the Transportation Facilities Workshop, May 1974, American Society of  
Civil Engineer

### **Recent Railroad/Transit Cases**

- Light rail repair liability: salvage value estimate after collision, in process.
- Collision train-pedestrian fatality: developed comparative risk analysis for pedestrian and train operator.
- Train operator: injured during pedestrian suicide
- Railcar damage: excess height rail car damage to steel warehouse
- Car passenger: injured at grade crossing with steep grade
- Worker fatality: during repairs to private railyard
- Railroad crossing fatality: public RR crossing
- Vehicle passenger fatality: private crossing with steep grade
- Pedestrian fatality: light rail crossing
- Pedestrian injury: acute railroad crossing
- Vehicle-train collision: train strikes vehicle stopped in crossing
- Child in railroad crossing: second train accident
- People mover: injury to passenger
- Railroad right of way: required railroad right of way dispute

### **Recent Highway Cases**

- Wrong way driver on freeway exit
- Truck collision fatality
- Pedestrian injured after exiting bus
- Pedestrian fatality by transit bus
- Vehicle hit power pole at railroad crossing with steep approach
- Farm vehicle road accident
- Analysis of traffic signal operation for vehicle collision
- Analysis of traffic signal operation for pedestrian collision
- Pavement construction accident
- Injury to passenger at bus shelter
- Injury to motorist at high accident location
- Fatality to passenger at bus shelter
- Injury to passenger at bus shelter
- Repair cost review for truck bridge rail collision

### **Safety Research Projects:**

1. Public railroad crossing accidents
2. Railroad highway vehicle accidents
3. Private railroad crossing accidents
4. Bus shelter accidents
5. Truck terminal accidents
6. Roadway accidents
7. Slip, trips and falls
8. Passenger rail platform accidents
9. Emergency braking and sight distance
10. Bridge guardrail construction

## **Depositions and Trial Testimony**

1. Tuamu-Vaili v. Richmond Pacific Railroad  
Case No. MSC15-01719  
Superior Court, County of Contra Costa, California  
Deposed for plaintiff, Tuamu-Vaili
  
2. Cuenna Clerk vs Bi-State Development Agency of Missouri-Illinois Metropolitan District  
Case. No. 11SL-CC02419  
Circuit Court, Division No. 17, County of St. Louis, State of Missouri,  
Deposed for plaintiff, Cuenna Clerk
  
3. Donna I. El-Hehiawy v. The City and County of Denver, Bombardier Transportation  
Case No. 2018CV30966  
District Court, City and County of Denver Colorado  
Testified for plaintiff, Donna I. El-Hehiawy
  
4. Randy Hall v National Railroad Passenger Corporation dba AMTRAK  
Case No. 3:CV-02312-WHA  
Northern District of California  
Deposed for plaintiff, Randy Hall