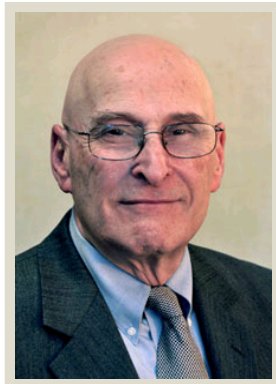


Faculty - Joseph M. Sussman

Faculty

[Lecturers](#)[Researchers](#)[Postdocs](#)[Staff](#)[Printer-friendly version](#)

Joseph M. Sussman

JR East Professor**Professor of Civil and Environmental
Engineering and Engineering Systems**

MIT

Room 1-163

77 Massachusetts Avenue

Cambridge, MA, 02139

Telephone: 617.253.4430*Fax:* 617-258-5942*Email:* sussman@mit.edu*Research Website:* <http://web.mit.edu/hsr-group/index.html>*Assistant:* Christine Blackett / cblacket@mit.edu[View Publications](#)

Education

- Ph.D. 1967, MIT
- M.S.C.E. 1963, University of New Hampshire
- B.C.E. 1961, City College of New York

[Curriculum vitae \(pdf\)](#)

Research Interests

Professor Sussman specializes in the study of Complex, Large-Scale, Interconnected, Open, Sociotechnical (CLIOS) Systems and he has developed the CLIOS Process to study such systems. He has focused recently on developing a new methodology for regional strategic transportation planning, integrating ideas from strategic management, scenario-building, and technology architectures, and applying it to cases in the U.S. and abroad. Currently his work in the CLIOS area deals with transportation, technology and sustainability in Mexico City; Kuala Lumpur, Malaysia; and Portugal. Professor Sussman also has worked extensively on Intelligent Transportation Systems (ITS), helping to build the U.S. national program and develop an "intelligent corridor" in Bangkok. He has developed a comparison of ITS programs in Western Europe, Japan and the U.S. and helped develop regional ITS architectures in the U.S. His research in both freight and passenger railroads focuses on service reliability, rail operations, maintenance, high-speed rail, and risk assessment.

To access his MIT OpenCourseWare sites:

- [1.221J / 11.527J / ESD.201J Transportation Systems, Fall 2004](#)

- 1.212J / ESD.221J An Introduction to Intelligent Transportation Systems, Spring 2005
- 1.201J / 11.545J / ESD.210J Introduction to Transportation Systems, Fall 2006
- 1.011 Project Evaluation, Spring 2011

Teaching Interests

- Technology, Systems, Institutional and Management Issues in Transportation Systems, Engineering Systems Design, Intelligent Transportation Systems (ITS)

Selected Publications

1. 2005: , Springer, New York, NY.
2. 2000: *Introduction to Transportation Systems*, Artech House, Boston, MA.
3. 2006: "Intelligent Transportation Systems: Can They Cure Congestion?" *Connected Transportation* (110-118), Cisco Systems.
4. 2005: "New Approach to Transportation Planning for the 21st Century: Regional Strategic Transportation Planning as a CLIOS Process," *Transportation Research Record* 1931, National Academy Press, Washington, DC (with Sgouris Sgouridis and John Ward).

[View entire publications list >>](#)



Massachusetts Institute of Technology Department of Civil and Environmental Engineering
77 Massachusetts Avenue, Room 1-290 ■ Cambridge, MA 02139-4307 ■ (617) 253-7101

