

# Reinhard Clever, Ph.D.

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## EXPERIENCE

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### HIGH SPEED RAIL CONSULTING AND RESEARCH

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#### **thinkMetric® Transportation Consulting, 2009 – present**

Consulting with impacted communities to formulate a strategic response to the planned California High Speed Rail construction by leveraging Asian and European experience.

#### **Postdoctoral Strategic Planning and Research, 2007— 2009**

- Published book: [The Competitive Advantage of High Speed Rail](#): Airport and Station Accessibility as a Determinant of Mode Choice (2008).
- Summarized major findings of a National Science Foundation sponsored research trip to South Korea: [Exemplary Wayfinding Signs of the Seoul Subway System](#): Detailed Information without Clutter (2007).
- Made intensive dissertation research on the competition between air and rail accessible in a concise TRB publication and presentation: [The Interaction of Air and Rail in Japan](#) (2008).
- Expanded transportation engineering skills to include traffic safety. Conducted research on the safety of American freeways versus German autobahns and published paper: [Can Lane Discipline Decrease the Sensitivity of Freeway Fatality Rates to Increases in Speed Limits?](#) Paper was presented in 2009 both at the 50<sup>th</sup> Annual Transportation Research Forum in Portland, OR and the Institute of Transportation Engineers (ITE) Annual Meeting and Exhibit in San Antonio, TX.

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## AVIATION CONSULTING

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#### **Roberts & Associates, Hayward, California, 1990—1993**

- **Project Management**  
Project Manager for the successful representation of Northern Air Cargo in Department of Transportation regulatory proceedings resulting in the award of the Anchorage—Magadan—Khabarovsk (Siberia) route, coveted by three carriers, including UPS. This necessitated the assessment of the marketing potential of a route with no historic traffic data. Obtained follow-up project from client to create detailed marketing plan.
- **Expert Testimony at Regulatory Proceeding**  
Gave expert testimony in support of the City of Houston in a route award proceeding contested by Federal Express and UPS.
- **Airport Marketing**  
Streamlined procedure for the preparation of airport service analyses, an essential tool in the development of competitive strategies.
- **Assessment of Political Climate**  
Addressed political sensitivities in R&A study prepared for the Berlin Airport Authority arguing against the closure of inner-city airport.

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## AIR CARGO PRICING AND MARKETING

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### **Federal Express**, Los Angeles, California, 1989

During buy-out of Flying Tigers by Federal Express assisted in reconfiguring Flying Tigers operational procedures to those of Federal Express. The economics of low freight rates necessitated 100% load factors which meant freight was left behind. For Federal Express allocations were a foreign concept.

### **Flying Tigers**, Los Angeles, California, 1983—1989

- **Project Management**  
Conceived, designed, and implemented the Tiger Door-to-Door Density Program, worth \$125,000.- in monthly revenues, by employing selective pricing incentives to improve freight mix in the domestic system. Product took advantage of domestic cargo planes usually "cubing out" before "weighing out." Established handling procedures for operations, billing, and sales.
- **Resource Allocation**  
Allocated space on all core international U.S. outbound flights to major customers and sales regions safeguarding profit plan guidelines. Complexity increased 4-fold with no additional manpower required.  
  
Transitioned process into Federal Express operational structure.
- **Multimodal Freight Systems.**  
In cooperation with Tiger Intermodal coordinated Japan to Los Angeles ocean rates with air freight rates from Los Angeles to Manaus, Brazil in order to optimize price/time ratio for subsidiaries of Japanese companies.
- **Domestic Rate Structure Overhaul**  
Completely redesigned Tiger Door-to-Door rate structure, necessitated by competitors' move to a more simplified pricing system. New rate structure succeeded in being revenue neutral and more profitable due to product mix improvements.
- **International Pricing Analysis and Automation**  
Approved special rates for corporate customers to Europe, Asia, and Latin America sequentially. Streamlined job function by computerizing override and incentive programs.

### **Flying Tigers**, John F. Kennedy Airport, NY, 1982—1983

- **Liaison**  
Funneled all pricing and special handling request from New York Sales Region to headquarters. Approved special rates for corporate customers.
- **Logistics**  
Coordinated large companies' physical distribution needs with Flying Tigers' operational constraints, establishing new handling and billing procedures deviating from established paperwork flow.

## AIR CARGO SALES

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### **Randy International**, John F. Kennedy Airport, NY, 1981—1982

Liaison between seven domestic stations and French and Belgian representatives.

### **International Charter Brokers**, John F. Kennedy Airport, NY, 1980—1981

Negotiated contracts for split charter operation to Johannesburg with all major forwarders.

### **Amerford Air Cargo**, John F. Kennedy Airport, NY, 1978—1979

Increased freight sales in midtown Manhattan territory by 15% within six months.

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## EDUCATION

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**Ph.D.** *University of California, Berkeley*, Department of Civil and Environmental Engineering, Transportation Engineering, [Airport and Station Accessibility as a Determinant of Mode Choice](#), 1997-2006.

This dissertation examines whether the positive experience with High Speed Rail in Europe and Japan is likely to be transferable to North America without significant modifications. It studies how important the access advantage was to the success of the Japanese system.

The last dissertation on the impact of access upon intercity mode choice was published in 1968. There was no interest in studying access to intercity passenger rail since all that European and Japanese High Speed Rail systems had to do is to connect already existing central stations. Lack of interest leads to paucity of useful data, and 1 ½ years of research was needed just to find the appropriate dataset for the dissertation.

The dissertation research, published as a book, led to a new paradigm: convergence. The new paradigm sees urban, regional, and high speed rail as one coherent system.

**M.S.** *University of California, Berkeley*, Department of Civil and Environmental Engineering, Transportation Engineering, 1993-1996.

**M.B.A.** *University of Miami, Florida*, 1976-1977.

**B.A.** *Ruhr Universität Bochum, Bochum, Germany*, B.A. Equivalent (Zwischenprüfung) in Business Administration and Economics, 1972-1975.

## PUBLICATIONS AND PRESENTATIONS

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### BOOK

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[The Competitive Advantage of High Speed Rail](#): Airport and Station Accessibility as a Determinant of Mode Choice, Saarbrücken: VDM – Verlag Dr. Müller (2008).

This book covers the accessibility advantage of High Speed Rail vis-à-vis air. Downtown-to-downtown connections do not offer a great access advantage in decentralized widely dispersed US metropolitan areas. In North America, outside of the Northeast Corridor, most business trips do not originate or terminate in the central business district and a much more sophisticated approach is likely to be necessary for HSR to be competitive with air.

### PUBLICATIONS RELATED TO RAIL ACCESS AND EGRESS

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[The Internal Distribution Advantage of High Speed Rail: The Call for Convergence](#), *Transportation Research Board, Intercity Rail Passenger Systems Update*, No. 15, 8-12, Fall 2009.

An article analyzing innovative solution to the accessibility challenge of intercity passenger rail in North America. It is based on systems integration and is particularly suited to the relatively low density and vastly dispersed U.S. metropolitan areas.

[The Interaction of Air and Rail in Japan](#), *Transportation Research Record*, **2043**, 1-12 (2008).

Air and high speed rail compete head-on in Japan. The Japanese transportation system therefore provides an excellent environment in which to study the nature of competition between air and intercity passenger rail. Individual contributors to terminal pair choice are contrasted between air and HSR, and the trade-offs between accessibility, frequency, and speed are analyzed in detail. The paper juxtaposes the different approaches to the speed/frequency/accessibility tradeoff taken by Japan, France, and Germany.

# Reinhard Clever, Ph.D.

[A Vision for Berlin and Maglev](#) (in German), *Zeitschrift für Verkehrswissenschaft (Journal of Transportation Science)*, **76**(1), 69-89 (2005).

This paper demonstrates how maglev technology solves the classic problem of integrating two airports in a metropolitan area. So far, this has never been attempted because the mode of transportation that could provide this service efficiently had not been invented yet.

[Integrated Timed Transfer](#): A European Perspective, *Transportation Research Record*, **1571**, 09-115 (1997).

Pulsed Hub or Integrated Timed Transfer (ITT) systems have been successfully employed as a way of systems integration between all public transport modes. The paper discusses the advantages and disadvantages of pulsed hub systems. It also analyzes the economics of ITT.

[Integrated Timed Transfer](#): A European Perspective, *Speed Lines Magazine, High Speed Ground Transportation Association*, 16-18, Summer 1998.

[Speed or Frequency](#): Thoughts on the Introduction of Integrated Timed Transfer in Long Distance Service of German Rail (in German), *Zeitschrift für Verkehrswissenschaft (Journal of Transportation Science)*, **67**(2), 138-182 (1996).

The article examines the feasibility of a pulsed hub system in Germany which includes all of intercity passenger rail. It also looks at the political reasons (decentralized decision making and environmental opposition) responsible for Germany having the slowest and probably also the most expensive high speed rail system in the world.

[A Future Vision of the InterCity Rail System](#): Necessary Changes in Schedules and Fares (in German). *Zeitschrift für Verkehrswissenschaft (Journal of Transportation Science)*, **65**(2), 121-147 (1994).

The essay analyzes the planning process for and the economics of new HSR lines in Germany. It specifically scrutinizes environmental concerns and local political opposition forcing compromises, which make it impossible for High Speed Rail to reach its full potential. It also postulates multiple stops for high speed trains in metropolitan areas.

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## PRESENTATIONS RELATED TO RAIL ACCESS AND EGRESS

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[A Vision for Caltrain](#): With or Without High Speed Rail, *Presentation at the (San Francisco Bay Area) Peninsula Cities Consortium Public Meeting*, Atherton, CA, May 2010.

[The Interaction of Air and Rail in Japan](#), *Presentation at the 87<sup>th</sup> Annual Meeting of the Transportation Research Board*, Washington, DC, January 2008.

[Airport and Station Accessibility as a Determinant of Mode Choice](#), *Presentation at the 86<sup>th</sup> Annual Meeting of the Transportation Research Board*, Washington, D.C., January 2007.

[Exemplary Wayfinding Signs of the Seoul Subway System](#): Detailed Information without Clutter, *Presentation to the Committee on Intermodal Transfer Facilities*, 86<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, DC, January 2007.

[Airport and Station Accessibility as a Determinant of Mode Choice](#), *Presentation at Seoul National University*, Seoul, Korea, September 2006.

[Integrated Timed Transfer](#): A European Perspective, *Presentation at the 76<sup>th</sup> Annual Meeting of the Transportation Research Board*, Washington, DC, January 1997.

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## LANGUAGES

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**German** (native), **English** (fluent), **French** (working knowledge), Spanish (some reading), Korean (novice), and Latin.

Researching investments in rail transit infrastructure is not possible, or at least not sensible, without drawing on the extensive experience accumulated in foreign countries. In order to leverage the existing knowledge base most efficiently, and to not have to rely on secondary research, it is important to speak foreign languages. There is not much information about regional pulsed hub systems available in English. In fact, there is no English term yet for this most advanced form of systems integration, *Integraler Taktfahrplan*, on which the highly successful Swiss Bahn 2000 is based.

## HONORS

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**University of California Transportation Center**, Dissertation Grant, one awarded of 9 applicants, 2000/2001.

**Fulbright-Hays Scholarship** for study in the United States. Granted extension to complete MBA, 1976/1977.

References furnished upon request.