



DEPARTMENT OF CIVIL ENGINEERING

Civil Engineering Grand Challenges Lecture

**The Future of Public Transit in the US: Effects of Changing Technologies and Travel Options and What We can Learn – and Not Learn – from Transit-Supportive Cities**

Professor Elizabeth Deakin

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University of California, Berkeley

Date: April 29, 2025 (Tuesday)

Time: 6:00 p.m. to 7:15 p.m.

Venue: Lecture Theatre 7, Library Extension, HKU

**Abstract**

A high quality transit system is widely seen to be a vital part of modern urban areas. Transit is not only a way to get around but also a service that helps to reduce air pollution and greenhouse gas emissions, improving public health. In addition, transit provides access to work, school, services, and social engagement for those who are not able to drive a car and increases economic productivity by lowering the amount of time people spend in traffic.

In many US metropolitan areas, plans and policies call for substantial transit ridership increases in order to meet adopted social and environmental goals. Efforts to increase transit use have involved substantial federal and local government funding for capital investments in transit, ongoing subsidies of transit operations, policies to create higher densities of development around transit stations, and added investments for improved bicycle, pedestrian, and new mobility options connecting to transit. However, the feasibility of achieving substantially higher transit mode shares remains in question. Many cities have dense urban centers with high rates of walking and transit use, but outside of these centers, low density development prevails and transit services are limited. As a result, most Americans rely on private automobiles for their daily trips.

Before the pandemic, transit's ridership was increasing in some urban areas of the US but declining in others. Advances such as smart cards for fare payments, real time information systems, and electric and other alt-fuel buses improved customer experience and supported transit use. Experiments with new mobility ranging from bikesharing to driverless shuttles also showed promise, for suburbs as well as for city centers. However, the pandemic upended many of these advances. While services that whose ridership was primarily low and moderate income workers whose jobs required them to show up for work recovered fairly well, systems that had attracted many so-called "choice" riders suffered. Many of these latter transit users still have not returned – primarily those who can work at home or drive to work. Today, many US transit systems are facing "fiscal cliffs" as pandemic-induced bailout money runs out and ridership remains low.

This raises several questions about the future of transit in the American context. Will transit recover its ridership over time, or is the current decline actually a new normal? Could further innovations in transit – or what we include in the family of services called transit – bring riders back? Are their larger structural changes in funding, service offerings, and pricing that could make a difference? Can the US learn from observing the experiences of transit-supportive cities, such as Hong Kong, Tokyo, London, and Zurich, and if so, what are the key actions that should be taken?

This talk will discuss the US experience with transit, the current situation, and new approaches being considered, using the San Francisco Bay Area in its efforts to promote transit as a case example. The discussion then will turn to the question of what we can learn from international experience and explore possibilities for mutual investigations.

#### **About the Speaker**

Elizabeth Deakin is Professor Emerita of City and Regional Planning and Urban Design at the University of California, Berkeley. She holds an S.B. in Political Science and an S.M. in Civil Engineering – Transportation Systems, both from the Massachusetts Institute of Technology, a J.D. from Boston College Law School, and an honorary Ph.D. from the Royal Institute of Technology of Stockholm (KTH.)

Deakin's research interests include transportation and land use policy, planning and analysis; social and environmental impacts of urban development, and new technologies and their potential impacts. She has published over 300 journal articles, conference papers, book chapters and research reports as well as several books, including *Transportation, Land Use, and Environmental Planning* (Elizabeth Deakin, ed.), Elsevier, 2019, and *High Speed Rail and Sustainability* (Perez-Henriquez, Blas and Elizabeth Deakin, eds.), Routledge, 2017.

Deakin has been an advocate for nonmotorized transportation, public transit, low emission vehicles, and efficient traffic operations. Early in her career she coauthored work on street designs and traffic controls designed to improve neighborhood livability, while also working to help local governments design energy efficient and environmentally sound traffic operations strategies for major signalized arterials. She has worked with transit agencies throughout her career on topics ranging from fare equity policies to traffic mitigation linkages and has advised them on mass transit and high speed rail station design and station area development policies. She has also worked extensively with elected officials and policy boards at the local, regional, and state levels and has testified on transportation issues for the California Assembly and Senate and for committees of the US House and Senate. She contributed to several iterations of the US Clean Air Act Amendments as well as to several provisions of federal transportation legislation.

In the 1990s Deakin was one of the creators of several plans for transit-oriented development that won prizes from the American Planning Association (APA) and the American Institute of Architects (AIA). She was the 2018 recipient of the Association of Collegiate Schools of Planning's Distinguished Educator Award and the University of California Institute of Transportation Studies Distinguished Legacy Award.

She recently co-authored a study on the prospects for regional land use-transportation planning in the Toronto, Canada metropolitan area and authored a white paper on the effects of urban limit lines and the prospects for better integrating them with sustainability policies in suburban California. At present, she is leading a study on the effects of downtown plans for post-COVID recovery on transit ridership. In addition, she has taught several short courses on sustainable transportation for New York University Abu Dhabi.

- ALL ARE WELCOME -