

**Transportation Learning Network**

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**Presentation Series: 2022 - 2023**

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**MPC-638 Analysis of ABC Bridge Column-to-Footing Joints**



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| **DATE:** Wednesday, September 14, 2022 | **TIME:** 9:30 AM – 10:30 AM CST (8:30 AM – 9:30 AM MT) |
| Register in advance for this meeting (Delivery via Zoom): <https://ndsu.zoom.us/meeting/register/tJUkcOChrTwvGd3D5OGdU1i2kUA7n822kEm0>  |

**DESCRIPTION:** Accelerated Bridge Construction (ABC) has been implemented in bridge construction because it provides advantages for commuters in urban areas. Prefabrication of bridge structural components is a highly effective method and is one of the ABC methods of Prefabricated Bridge Elements and Systems (PBES) proposed by the Federal Highway Administration. There is a need to develop ABC column-to-footing joints for bridges located in moderate- and high-seismic regions. The main goal of the research is to show using advanced analysis methods that such joints constructed with precast elements perform in a satisfactory manner similar to monolithic cast-in-place (CIP) joints. A second goal of the research is to develop guidelines for the seismic design of these joints.

**PRESENTER:**

**D****r. Chris Pantelides** been with the Department of Civil and Environmental Engineering at the University of Utah since 1991 where he is currently a Professor and Associate Chair. He received his B.E. in Civil Engineering from the American University of Beirut in 1980, his M.Sc. from the University of Missouri-Rolla in 1983 and his Ph.D. from the University of Missouri-Rolla in 1987. He was a design structural engineer in 1980 with Dar-Al-Handasah Consultants; from 1981-82 he was a construction engineer with Odon and Odostromaton, S.A.