



**CBE Consultants, Inc.**

1400 N Providence Road, Suite 412 • Media, PA 19063

Phone: (215) 486-6847 • Fax: (215) 486-6848

<http://www.cbeconsultants.com/>

**WILLIAM BUSSONE, PE**

**PROFESSIONAL EXPERIENCE RELATED TO AMUSEMENT RIDES AND DEVICES**

Mr. William Bussone, P.E., is the Managing Engineer at CBE Consultants, Inc., Mr. Bussone applies his expertise in the principles of biodynamics, biomechanics, and mechanical engineering to a wide range of engineering projects. He addresses issues involving the biomechanics of human injury in the areas of human tolerance, human kinematics, and rigid body dynamics. Mr. Bussone successfully uses his knowledge in evaluating issues related to injury causation and product liability in a broad range of areas, including Amusement Rides and Attractions.

Mr. Bussone has conducted analyses of a wide variety of amusement rides and devices, including roller-coasters, water rides, raft rides, spinning rides, and trampoline courts to examine the rider/patron kinematics and the potential for injuries associated with the ride or device, and compared forces experienced during activities of daily living with those experienced on rides and devices. He has experience obtaining, analyzing, and evaluating ride acceleration profiles; obtaining and analyzing patron accelerations; evaluating restraint performance; evaluating accessibility; and evaluating standards-compliance to ASTM F2291, F2374, F2376, and F2970. He has consulted for amusement ride manufacturers in the design and approval of their products and for operators in ride biodynamic analyses and developing rider requirements and accessibility analyses. Mr. Bussone has been an active member of the ASTM International F24 Committee on Amusement Rides and Devices since 2004, and is currently a member of the F24 Acceleration Task Group.

In addition to the amusement-related experience presented above, Mr. Bussone has relevant and complementary experience in a number of other fields and activities. These include brain injury research, helmet performance and injury mechanisms, fall-related injury analyses, pediatric anthropometry and impact tolerance, and experience with the analysis of accidents occurring in other people-motive devices such as elevators, industrial equipment, and automobiles, for example. His work has been cited within SAE standards. Mr. Bussone has more than a decade of experience reviewing medical records, including medical imaging, for the purpose of evaluating the extent, distribution, and severity of injuries; the health and biomechanical status of the individual; and the past medical history as it relates to the biomechanical analysis and claims.

**Memberships and Professional Affiliations**

ASTM International, F24 committee (member), 2004-present

- F24.24 G-force Task Group

Society of Automotive Engineers (member)

**Academic Credentials**

Virginia Tech	M.S, Mechanical Engineering	2005
Michigan Technological University (summa cum laude)	B.S., Biomedical Engineering	2003