

## Tom Bertulis

**T**om Bertulis, MS, P.E., PTOE, our second ITE and Association of Pedestrian and Bicycle Professionals (APBP) member to be featured as part of ITE's partnership with APBP, is the manager of traffic engineering at Design Consultants Inc. in Somerville, MA, USA. Tom has been on the APBP Board since January 2016 and serves as the treasurer and chair of the Finance Committee. He specializes in civil and traffic engineering for active transportation and has worked in half a dozen countries around the world, from Scotland to Brazil. Tom is also in his third year co-teaching a course on "Planning for Walking and Biking" at Tufts University.

**ITE JOURNAL: How did you get interested in transportation as a professional, with a focus on walking and bicycling?**

**TOM BERTULIS:** When I was 18, I spent a year in Munich, Germany. The city captivated me. I wanted to learn everything about how it functioned like a living, breathing, eco-system. I went on to study civil engineering at Santa Clara University. While I enjoy the technical side of civil and traffic engineering, it's the human side of multimodal design that really appealed to me. When I saw Dan Burden speak at a conference in May 2000, his words about creating community, reducing speeds, and designing around the pedestrian really resonated with me. While attending grad school at Northeastern University, I focused on people-orientated sustainable transportation. There is something about propelling myself on a bicycle that feels like nothing else. As of March 2018 I've

been car-free for exactly 20 years, even while living and working in some of the biggest cities in the world, such as São Paulo, Brazil and Mexico City, Mexico.

**ITEJ: How long have you been a member of APBP and ITE, and what have you learned from each of them? What synergy do you gain from being a member of both organizations?**

**TB:** I became a member of ITE in 2000 and APBP in 2002. I've attended numerous ITE and APBP conferences, and every time I came away inspired. The webinars from both ITE and APBP provide cutting edge technical information. I've learned the most from my activity on ITE's and APBP's list serves. From ITE, for example, I learned the more nuanced details of signal innovations such as adaptive signal control. From APBP I learned about fourth generation



bikeshare, the benefits of Community Land Trusts, and the importance of equity in building healthy communities. In the greater Boston, MA area, ITE and APBP have partnered to put on multiple events, from Pecha Kuchas to Cycle Track Tours. The skills and experiences of ITE members and APBP members complement each other nicely, and I benefit from receiving varied perspectives.

**ITEJ: Where should young professionals go to learn more about a career focused on bike/ped transportation infrastructure?**

**TB:** They should attend APBP and ITE conferences, as well as the Walk Bike Places conference, to learn from the active transportation specialists that attend. The ITE and APBP list serves and websites post job opportunities for multimodal professionals. There are also international opportunities to work in the bike/ped world. In 2004 I was on the "Walkable Communities" list serve and someone had posted about a job opening for an engineer to design bike/ped facilities in Scotland. It seemed like a long shot. But I applied for it and got it. My life was never the same. My advice would be to

### About APBP

The mission of the Association of Pedestrian and Bicycle Professionals (APBP) is to grow the pedestrian and bicycle profession and its influence by facilitating the exchange of professional and technical knowledge, elevating practitioners' skills and defining the field. From a handful of members in 1994, the organization has grown to include 1,300 members in the United States and Canada. APBP members work at all levels of government, in manufacturing, and as consultants, advocates, researchers, and students in a wide range of disciplines: transportation planning and engineering, urban design, landscape architecture, public health, active living, and Safe Routes to School. APBP offers technical training and resources to build capacity for sustainable transportation, including a monthly webinar series, a biennial conference, and the respected *Bicycle Parking Guidelines*, 2nd Edition.



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“go for the long shot.” Interest in the bike/ped profession has never been stronger.

**ITEJ: What projects have you worked on that had a big impact on your career or a community?**

**TB:** While working in Scotland, I worked on several bike master plan projects that transformed communities. In Latin America, I was able to bring many of the concepts I learned in Europe. I helped design and build the first bike box in Mexico City and later the first speed cushion. While working in Guadalajara, I helped design their first modern protected bike lane. It pleases me to see the growth in walking and biking in places where I worked. Closer to home, I designed both a concurrent pedestrian phase and an all-ped phase in the same signal cycle on East Broadway in Somerville. The streetscape improvements further activated the area. Many more people now come to shop, linger, and form friendships along this people-orientated street.

I've spent more than a decade at conferences presenting innovative topics. Since 2006 I've beaten the drum about advisory bike lanes, and it's inspiring to see their growth. I'm especially grateful that my Yielding-to-Pedestrians research was published by the Transportation Research Board and has helped lower city-wide speed limits in several cities. I currently co-teach a bike/ped planning class at Tufts University, and it's satisfying to inspire and interact with students who go on in their careers to promote changes in their communities.

**ITEJ: What new guidelines have helped advance bike/ped transportation engineering?**

**TB:** For years my hands were tied due to the limited flexibility of the one national bike guide available: the 1999 AASHTO *Guide for the Development of Bike*

*Facilities*. Finally ITE collaborated with the Congress for the New Urbanism, the Environmental Protection Agency, and the Federal Highway Administration (FHWA) to put out the groundbreaking guide *Designing Walkable Urban Thoroughfares*, which was approved in 2010. The following year in 2011, the National Association of City Transportation Officials (NACTO) pushed the envelope even further with their *Urban Bikeway Design Guide*, allowing cities like Seattle, WA to explode with 2-way protected bikeways. In 2015 the Massachusetts Department of Transportation *Separated Bike Lane Planning & Design Guide* launched and turned heads around the United States. Remarkably, it became

the first that allows “Separated Bike Lanes” to be built within roundabouts. Moreover, the North Carolina *Pedestrian Crossing Guidance* and the FHWA *Guide on Accessible Shared Streets* are two of the most exciting guidelines to come out for pedestrians in many years. I recently joined the National Committee on Uniform Traffic Control Devices (NCUTCD) to see if I could make an impact on the *Manual on Uniform Traffic Control Devices* (MUTCD). Many designers tap into impressive foreign guides like the Dutch guide produced by CROW, the Dutch Highway Engineering Research Association. NACTO, FHWA, and many others have opened a whole new world for bike/ped transportation professionals. **itej**

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