



VISION ZERO NETWORK

An Interview with Paula Flores

Paula Flores leads speed management action plans, Vision Zero corridor safety studies and complete streets projects for Greenman-Pedersen, Inc. in Tampa Florida. Paula served as the International President for the Institute of Transportation Engineers (ITE) in 2016 and completed her term on the Executive Committee in 2017.



It's the United Nations Global Road Safety Week. And the focus this year is on managing speed for safety. Speed is such a critical factor in preventing traffic fatalities and injuries. As a practitioner, what are the strategies you think work best to slow people down to safe, appropriate speeds?

There is a misconception that a silver bullet exists to address the traffic safety crisis our communities are experiencing, and managing speed is no different. Managing speed is complex and so are the solutions. Hence, a comprehensive approach is needed for speed management to be successful in eliminating fatal and serious injury crashes. As the Vision Zero principles indicate, to address the traffic safety crisis, we must work on creating the physical environment for safe travel for all including Safe People, Safe Streets, Safe Speeds, and Safe Vehicles.

By far the most effective strategy is to address the current built environment by retrofitting self-enforcing streets through the application of complete streets principles and traffic calming treatments. In urban corridors, create opportunities for all users by adding more frequent safe crossings (supported by traffic signals, Hawks/beacons, RRFBs) at uncontrolled intersection or midblock locations. This will naturally break up long stretches of road where vehicles normally speed. Narrowing or eliminating travel lanes and repurposing the additional space for bicycle and pedestrian facilities are also key strategies. Tightening turning radius to force vehicles to slow down as they turn right, or using center line hardening techniques to slow down left turn vehicles should also be considered.

There are many other treatments that include technology, such as coordinating traffic signals to a lower target speed or automated enforcement cameras. Many of the physical street treatments can be applied on an interim basis with paint, signs and markings until funding can be made available for permanent street modifications. But street design modifications alone will not be sufficient, the context (urban, suburban, rural) and target speed (target speed=design speed=posted speed) needs to be defined properly.

Identifying the context and then choosing the right target speed is critical to effective street design. Design speed drives the technical parameters of street design. Parameters such as: street and lane width, intersection spacing, sidewalk width, parking lanes, bike facility types, horizontal and vertical alignments, sight distance, turning lane lengths, medians, curb radius and other factors. If the design speed isn't addressed, the innovative design may still fall short. Once you successfully navigate through the target speed and design process, an evaluation of the effectiveness of the treatments to achieve the target speed is still necessary. It is an iterative process, and if the target speed and safety outcomes are not realized, more traffic calming

measures may be necessary. Once a self-enforcing street is properly delivering the right safety outcomes by eliminating severe injury crashes, enforcement is no longer needed.

We're leading a campaign calling on the Biden Administration to commit to a goal of zero traffic deaths by 2050. Do you think that's achievable? And how will managing speed for safety play a part?

Absolutely, I do think zero traffic deaths in the US by 2050 is achievable! In fact, with the Biden Administration's Climate Action Plan to reduce emissions by 50% by 2030, 50% reduction in traffic deaths should be a parallel goal. For many in the transportation industry that understand what the Climate Action Plan means, and the aggressive steps that must be taken to achieve it, managing speed for safety will play a role. In order to reduce transportation emissions, non-motorized transportation modes must have a higher mode share in our system. For example, during the pandemic, the significant reduction in vehicle use and the higher reliance on sustainable transportation modes for short trips had a significant positive effect on air quality. Hence, we must transition to travel modes that effectively carry more "people" (trains, transit) or modes that are not fossil fuel dependent (walking and biking). The more these sustainable modes of transportation are introduced into the streets, the higher the crash exposure, and the more likely speeds need to be managed to provide the safe environment all users need, expect and deserve.

What are two near-term changes you would urge at the Federal level to manage speeds for safety? What about at the State & local levels, generally?

At the Federal level, funding allocation needs to change. Sustainable modes of transportation are what is needed most, yet the majority of funding is still allocated to more highways and non-sustainable modes, including EV and AV's. Second, there should be more accountability for states to address safety more seriously. As we know, there are states that year after year continue to report more fatal and serious injury crashes, their policies aren't evolving and their priorities have not changed. It's important to recognize that incremental progress is no longer acceptable given the increasingly rapid advances in technology and the wealth of knowledge about how to prevent fatal crashes. As the National Safety Council has said "...with the right policies, technologies, and strategy, we could prevent all roadway deaths."

At State level one of the challenges we run across in being more effective at managing speeds is the legislative regulations related to speed limit setting. Every state may be different, but local communities may have little authority to regulate speeds. Another state level legislative concern is the ability to use automated enforcement cameras for red-light running or speed. Automated enforcement is extremely effective in reducing and eliminating fatal and serious injury crashes, yet are some of the most misunderstood tools by elected officials, practitioners and the general public. And in today's world, these automated enforcement tools provide the most equitable means of enforcement of the most egregious abusers on our streets. So, why are these tools so often restricted and debated in communities across the country?

At the local levels, every community should be re-evaluating their policies and priorities. As others have said "a city's priorities are reflected in their budget allocations." Local governments

should be re-evaluating their prioritization of infrastructure projects with the highest safety outcomes first. Re-evaluating their metrics for their investment priorities. Investing in marginalized communities that rely on sustainable modes, yet have been disenfranchised for so long. Local communities should be less reliant on state-level design standards and invest in creating their local design standards that meet their community's needs. Local agencies should be flexible, nimble and open to new practices to address the challenges of today and build a better environment for tomorrow.

If reducing speeds is so core to improving safety, why do you think it's not done more often and fully? What's holding us back?

There is an expectation by drivers that moving at free flow speeds is their right, and that speed limits are a minimum instead of the maximum. Drivers forget that their decisions behind the wheel may have negative consequences on other street users, and the deterrents to aggressive driving and speeding related behaviors just aren't harsh enough to affect said behavior. After completing a local Speed Management Action Plan, it was very apparent that there are several elements to this question. In no particular order: 1) Professionals are too quick to defend old practices. "This is how we do it, and you're telling me this doesn't work? They feel compelled to defend and take recommendations for change as a personal attack. Until new practices on setting speeds, and self-enforcing street design are institutionalized, it becomes an uphill battle. This makes Federal updates like the current MUTCD NPA, that also drives state and local practice, that much more important. 2) Professionals have been taught to stay within the current boundaries of standards to minimize the "perceived" liability implications. While Federal design guidance always stresses the need for engineering judgement and the ability to justify design exceptions when not in compliance, using engineering judgement has become the road less travelled instead of the norm. The problem is, with the crash crisis communities are facing, doing nothing is being part of the problem. The mere threat of a potential lawsuit or loud opposition by the public that often gets elected officials attention, is enough for agencies/professionals to back off on making progressive changes or changes that intuitively are misunderstood by the public (i.e. speeding outcomes). There is also a disconnect within agencies, decisions are being made in silos by different departments (DPW, Engineering, Planning, Permitting, Construction, etc.) that may not have the same focus, understanding of the outcomes of their decisions on safety. Don't forget the opposition by the Fire Marshal to some of the physical design treatments. The communities that have successfully transformed their operations to focus on providing transportation networks that are safe, healthy, sustainable and equitable have had strong and unwavering leadership. Our communities deserve great leaders that will have the hard conversations, and that will say "I understand the intent of that policy, and I am standing up for my community!" We need more professionals to stand up and take a position to ensure safer streets.

How can the professionals in your field do a better job meeting the challenges of the day?

Most professionals in my field pride themselves in being problem solvers. However, it's very evident we are not evolving our practice fast enough to meet the needs of our communities. It is through experimentation, research, and truly redefining what is the problem that will lead to innovation and evolving practice. We remind ourselves that transportation is not important for

what it is (roads, bridges, trains and planes) but rather for what it does – it gets people where they need to go and connects them to opportunity. We should be measuring projects by how many lives the project saves, how many children are now able to walk to school, how many people can access services and health care safely, how many disadvantaged can now contribute back to society and support their families; how the project has affected the environment; how it assists in long term resiliency efforts, and so on. It is important we always focus on what transportation does for people. More than ever, professionals must be advocating for safe streets, we must evolve our practices faster and we must truly do our job to provide new solutions. Together, we can make a difference in our built environment.