

# Infrastructure tied to public safety

By D. WAYNE KLOTZ  
HOUSTON CHRONICLE

Oct. 25, 2009, 7:30PM

Quite often, when I speak as president of the American Society of Civil Engineers (ASCE), my audience thinks that I'm talking only about building roads or stormwater drains ... whatever their current projects are. What I'm really talking about is public safety. The public safety that civil engineers design and build.

As cities balance their budgets, the challenge of prioritizing funding becomes more and more important and the squeeze on public resources becomes more severe. But we must not compromise our public safety. Period.

On behalf of the 146,000 ASCE civil engineers around the world, I've worked on dozens of projects but none more important to all Americans than the release of ASCE's 2009 report card on America's infrastructure. The report card revealed that America needs to invest \$2.2 trillion over the next 5 years to repair and support our public systems — from aviation to drinking water, energy to levees, parks to roads, schools to transit and wastewater.

That's a lot of money. But thankfully, that's also a lot of job creation. While the portion of the stimulus dollars dedicated to infrastructure has put some people to work — from construction workers to engineers — the spending is spread out over two years so that it remains a down payment on our infrastructure needs.

But, for our own safety, we can't stop there. There is too much at stake and our infrastructure is failing in too many places.

Public safety is usually connected, in our minds, to the brave firefighters, emergency medical personnel and police officers who come to our aid in times of trouble and protect us around-the-clock. The phrase public safety feels like it means only cops, firefighters and emergency medical services (EMS). But it means so much more.

Civil engineers are not designing software for your computer or a new gaming system for you to enjoy. They are designing the highways, roads, bridges, flood prevention systems, water and sewer systems and more. The things that civil engineers design are usually big, complicated and funded with tax dollars because they benefit all of us.

So civil engineers are heroes, too. Otherwise, you'd never trust your life to that roadway, bridge, or airport runway again. You'd never drink water from any source and you wouldn't go out in the rain.

Without safe airports, roads, bridges and tunnels, our ambulances and police cars, fire trucks and helicopters wouldn't be able to get to you in a crisis. And if a bridge or tunnel fails it will likely involve grave injury or even death. Public safety.

Without these systems to deliver clean drinking water and clean up wastewater the public health of our communities would be a risk. Public safety.

Without the drainage systems to protect our homes and businesses from flooding, our waterway systems would overflow, endangering all our lives. Public safety.

These examples serve to teach us if we'll let them of the importance of our infrastructure to public safety. Day by day our police officers, firefighters and EMS personnel use our roads and airports to keep us safe. So how is it that we have allowed ourselves to treat infrastructure as separate from public safety when it comes to budget priorities and planning?

So what can we do?

- We must stop crafting an artificial competition between these public safety components. We simply must stop comparing apples to orangutans when we're budgeting for public safety.
- We must treat infrastructure as public safety and invest in it ... for our safety and the safety of future Houstonians, too.
- And yes, we must invest in the human resources we need to build and maintain a thriving safety net of those whose lives are willingly put at risk for the rest of us.

Public safety. Our lives depend upon it.

*Klotz is president of the American Society of Civil Engineers and of Klotz Associates, Inc., a Texas engineering firm providing transportation, water and sewer, traffic, land development, drainage and port consulting engineering services.*