

Speech given by Fred Salvucci  
for DUSP graduate students  
Thursday, June 4, 2009

First of all, congratulations to you, the graduates, and to your family and friends who have supported you as you have reached this very significant point of achievement.

For me, it is an honor being asked to address you at your "Commencement." I prefer the term "Commencement" to "Graduation" because it reminds us that today is the first day of the rest of your life, and your education continues and begins again as you begin the next phase of your careers. In my own case, when I graduated from MIT with a Masters degree in Civil Engineering, I was lucky enough to work with Tunney Lee at the BRA. Many of you know Tunney, and have studied with him here at DUSP. I have always felt that I learned more from working with Tunney at the BRA than at any other point in my career. Effectively, that experience was the PhD that I didn't earn at a formal university program. So your education isn't over; it is beginning again.

I have had the privilege of working with many of you, so I know you are all very smart. Because of heredity, I presume your parents are also smart. So I'm about to tell you something I think you already know. I have some bad news, and some good news. The bad news is that you will never make much money in this field. But that is also the good news, because the modest pay gives you great freedom to never feel you are trapped in a high-pay but low-satisfaction job. You are entering a field where you will be at the center of the issues that will shape the human condition of this planet, and the best hope of achieving sustainable economic growth -- creating cities that people will love to live in. Now you are not about to be taking a vow of poverty, becoming nuns and monks in the service of the Lord, but neither are you like some of the graduates at Sloan, about to enter jobs they may

come to hate: figuring out how to eliminate jobs and shift production to wherever environmental protection is weakest, wages are low, and workers have no rights, but being trapped by high pay into believing they have to stick with that unhappiness. Your modest pay will be your freedom to leave a job if you don't believe you are happy, and making a contribution to the quality of life on this planet. You will have the opportunity to "speak truth to power," as your friend from Harvard says. If you don't have that opportunity, leave and find a position where you can. *"Freedom's just another word for nothing left to lose ..."* -- it is your greatest asset.

This is a particularly auspicious time for DUSP and DUSP graduates. Look at what has been happening in just the past few weeks. President Obama has just announced that EPA will say "yes" to the California Car, and make it the national standard, finally moving us towards automobiles with somewhat less destructive impact on the environment. But let us also consider how limited this step is. First, we need to recognize that President Obama has the opportunity to make this decision only because of decades of work in places like California, Massachusetts, and the Northeast, where activists defied the power of the auto industry (and a lot of bad policy advice from parts of MIT), and insisted on technology forcing regulation. In places like Massachusetts, the fact that the auto industry had abandoned their workers here and essentially stopped all production meant that technology-oriented entrepreneurs could be listened to, and stricter regulation adopted notwithstanding opposition from Detroit. Between California, Massachusetts, and the Northeast, 45% of the U.S. automobile market has been constrained to comply with standards that Detroit's power in the US Congress couldn't block. This happened because hundreds of activists, whose names you never hear, with support from Republican

governors like Weld and Schwarzenegger forced the issue all the way to the US Supreme Court victory (ruling that greenhouse gases are a pollutant, and that EPA has an obligation to regulate such emissions). "Standing on the shoulders" of the giants of environmental activism, with the leadership of the U.S. auto industry discredited and looking for Federal bailouts, it is now possible for Obama to adopt more sensible national standards, but even in their weakened state the auto industry is trying to insist on national standards constraining the power of states like California to lead, attempting to destroy the foundation of citizen activism that has been the basis of the limited success we have achieved. They also continue to propagate the big lie that the greener cars will cost more money, when it was the leaders of the U.S. auto industry who chose to put the substantial technology progress of the last 30 years into heavier and faster cars, rather than lighter weight, greener, and more affordable cars.

Even more fundamentally, let's look at how limited the potential is for technological fixes to the automobile. The crisis threatening the world's climate has not been caused by growth in greenhouse gas production beyond 1990 levels, but by the growth in emissions since 1790. If we look at levels of emissions that are sustainable to the year 2050, and adopt the principle suggested by United Nations data, that every human on earth should be limited to the same restricted emissions per capita, even with best available auto technology, U.S. citizens will be generating 10 times their fair share of greenhouse gas, and Europeans 5 times. As impressive as the improvements in auto technology are, they can only mitigate a transition to cities where high standards of living and accessibility are achieved without relying on the automobile at all. Viewed in this context, we cannot treat Governor Schwarzenegger as an environmental hero for advancing cleaner cars, while he is

underfunding and undermining public transportation systems throughout California. Sustainable pedestrian and transit-oriented cities must become the center of the climate change agenda, and MIT-DUSP and DUSP graduates need to be at the center of that effort.

The Chinese ideogram for "crisis," I am told, is a combination of the ideograms for "danger" and "opportunity." We are in a crisis. Small steps are important, but we need gigantic sustained effort to achieve the level of transformation required in our cities. The huge effort required to produce the "stimulus" program of shovel-ready projects should remind us of the challenge ahead. We have had 50 years of U.S. infrastructure policy dominated by the Interstate highway system, which has contributed to our sprawled landscape. It will take a larger, sustained effort to change course towards sustainable cities.

These observations may seem odd coming from someone who spent over 20 years of his life working to help the "Big Dig" become a reality. But the Big Dig, like the California Car, is useful only as a transitional mechanism. The Big Dig used Interstate highway funding to mend the most visible scars on Boston's urban landscape, and establish the accessibility to maintain the centrality of Boston in the regional economy. But ultimately success relies on an overwhelmingly transit-oriented future. And for that to happen we need Federal initiatives larger and more robust than the Interstate highway program to support this shift; we need similar changes in World Bank policies, and we need to understand that this transformation will succeed or fail in the cities of China and India, parts of the world where fewer than 10% of homeowners have automobiles. Can we build cities where high standards of living are achieved based on low or no car ownership,

prioritizing housing and clean water supplies, high pedestrian quality and transit, and have people love the outcome?

Look out the window at the most cherished parts of Boston. The modestly high-density downtown is possible only because of the MBTA transit system. The core of the subway system -- the Green, Blue, Orange, and Red Lines -- was built between 1897 and 1915, less than 20 years! [The only place where that level of transit formation is occurring is in Shanghai.] The park system from the Blue Hills and Fells Reservation to the Esplanade was assembled in the same period. The backbone of the regional water system, and the construction of the Clinton Dam and Wachusett Reservoir, were initiated in the 1890s (my grandfather came from Italy to work as a stonemason on the Clinton Dam). Most of the transit-oriented housing you have been living in comes from the same period of city formation. This period saw huge amounts of local job creation in building this urban fabric. This was largely before the automobile began absorbing purchasing power into autos and petroleum.

We are in the Sloan Building. Sloan was the architect of the wasteful paradigm of creating a "need" for a new car every two years, with steady upgrades from Chevrolet to Pontiac to Olds to Buick to Cadillac. We're reading a lot of nostalgic stuff about autos lately. I was a teenager in the late 1950s. I still wear my belt buckle on the side (the fad of my corner in 1954). I understand the nostalgia for those "Happy Days" when cars meant fun. But nostalgia is a poor basis for policy, and we need to move in a very different direction. We need to think globally and act locally. Is it sensible to celebrate the new Sloan Building as "green" when it sits on a parking garage that cost over \$100,000 per space to build?

We also need to recognize that we won't get the kind of change we need unless we fight for it. I believe Obama will prove to be one of our greatest presidents, but he can't do this by himself. As I once heard Mel King observe in his Zen-like way, "A project will be as good as the opposition to it forces it to become." If we want a fundamental different direction for our cities, it will cost money and political will. We need to develop that vision and fight for it.

In this kind of talk I'm supposed to give some advice based on experience. So let me provide some advice (with ambiguity).

Perhaps the most satisfying job I ever had was managing the "Little City Hall" in East Boston during the Kevin White administration. In the Little City Hall we did three things. First, we tried to respond to citizen requests, anything from getting a broken sidewalk fixed to helping someone register to vote. Second, we tried to analyze the pattern of complaints and see if we could improve the system so people wouldn't have to complain to get problems dealt with in timely fashion. Third, we tried to work with the community to identify longer-range opportunities (to capture part of the decayed waterfront for parks and housing), and threats from Logan Airport (to expand into the neighborhood, and build new highways through the neighborhood to the airport).

One day two elderly gentlemen, Mr. Vella and Mr. Nicosia, came into the office with an apparently simple request. They had an elderly drop-in center, which they loved, but there was only one restroom. The men used the drop-in center, but the ladies wouldn't come, because they viewed the restroom as a "men's room." The request was simply, "can you get an additional restroom installed?" I said yes, that's very reasonable. So I got to

work. In the same timeframe I was working with the community on blocking the airport expansion, and shifted the regional highway plan to become a regional transit plan.

Three years later, the second bathroom was complete, the airport expansion was stopped, and a buffer park in place between the airport and the neighborhood, the urban highways were stopped and the funds shifted to transit.

I believe three lessons emerged:

- (1) Everything in government takes the same length of time, so you might as well pick big things.
- (2) The second bathroom may have been more important to Mr. Vella and Mr. Nicosia.
- (3) The credibility to help organize the neighborhood on the airport and highway issues is very dependent upon delivering the second bathroom.

Earlier I said that part of our job is to "speak truth to power." That has two parts. First, "What is the truth?" We hope that the MIT education helps to figure that out. The second is, "Who has power?" Phil Clay just reminded us that the President of the United States used to be a community organizer in a Chicago ghetto. Sometimes, Mr. Vella and Mr. Nicosia may have more power than they or we understand.

In closing, I want to observe that talks like this pretend that somehow some extra dab of wisdom is going to be conferred on you as an extra gift 24 hours before receiving your diplomas. This expectation is of course substantially fictitious and reminds me of an ethnic joke I heard over and over as a teenager in an Italian-American construction worker family in the 1950s. According to the story, when the first large wave of southern Italian immigration occurred in the 1890-1910 period, Italian farm laborers and sharecroppers

were lured to the U.S. by tales that in America the streets were paved with gold. But when the Italian immigrants got to the U.S. cities they learned three truths:

- #1 The streets were not paved with gold.
- #2 In fact, the streets were not paved at all.
- #3 The Italians had been invited over to pave the streets, one backbreaking paving stone at a time.

The parallel is that you cannot figure out how to steer the planet in a healthy sustainability path by following advice from the problematic past. You need to "pave this street" yourself, one granite block at a time.

So now it's your turn -- go out and use your freedom to make the world's cities wonderful places. Good luck!