

## Carly Fiorina at Technology Policy Institute's Aspen Forum August 22, 2010

### Remarks

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Good morning everyone and thanks so much for joining us in Aspen. When Tom [Lenard] and I first met to talk about TPI which was what, a year plus ago? I had known Tom from his former instantiation and had been a participant in conferences like this at Aspen earlier, but I was uncertain if TPI was an organization that could really make its mark. But after spending time with Tom and his staff, I was convinced that TPI was an organization that we needed to participate in the formation and discussion of public policy in this nation. Tom and his team have done a fantastic job in providing thoughtful, non-partisan, intelligent advice to policymakers and I truly believe that this conference is an important contributor to the national discussion and debate about technology policy. I so appreciate all of you joining us for this conference. Aspen is always a good draw and I think we can promise you great sessions, great conversation, and great dialog. I myself on a personal level am somewhat grateful to have a brief oasis from the wilds of politics. We can talk about policy. We did invite Senator Boxer to join us because TPI wants to talk about policy issues always in a non-partisan, bi-partisan fashion.

As I open the conference this morning, I want us to cast our minds back to 15 years ago. I know it seems like a really long time. But, of course, 15 years in the scope of human experience is very little time at all. Think about 1995 and what we didn't have and what we didn't think about. 1995 was in many ways just the beginning of the dot-com boom. Or think about six years ago. Six years ago, 2004, in politics, we didn't have Facebook or Twitter. The whole process of politics, much less the whole process of human interaction and industry, was totally different in just a few short years. And that is why I believe discussions such as those we will have over the next day and a half are so critically important – because technology is fundamentally changing every aspect of our lives, of our businesses, and of our human interactions. And it is happening so quickly, so profoundly, that sometimes we don't even think about it at all or reflect on it; yet the changes that have been wrought already are profound indeed.

We live in a world now where anyone can communicate with anyone else, anywhere, anytime. That is revolutionary. We live in a time where anyone, anywhere can get access to any piece of information they choose. That is revolutionary. The ability to access any piece of information, the ability to communicate with anyone, anywhere has the impact over time of tearing down our traditional structures. If you think about how our organizations were put together, be they political structures or business structures, they have traditionally been hierarchical, and they have been based on the notion that information is power. We live in an age now where that power is literally disseminated to everyone and where hierarchies no longer function the way they used to. It puts pressure on hierarchies of all kinds, whether those are political or business. It puts pressure on people in organizations to find new ways to add value because possessing information, sharing information, is no longer something that only a few can do. Everyone can do it. People in positions of power and influence, whether in politics or business, can no longer claim that their influence comes from access to privileged information. And, of course, information technology now puts a whole new spotlight on the need for transparency and accountability.

I remember giving a speech several years ago right at the time of the formation of Wikileaks and saying to a group of leaders that, whatever we think of wikileaks.org, it changes forever the pressure to proactively be transparent about the activities of an organization. When a site is founded purely for the

purpose of disseminating information that is designed to be kept private, it changes power structures in really profound ways. And all of these things that we're talking about – the ability of technology to change hierarchical structures, the ability of technology to give, literally, power to the people over information and action – have happened over a relatively brief time in human history. That is what is inspiring and exciting about technology. It is also what is sobering for policymakers, because sometimes, technology moves so quickly that policymakers find it difficult to keep up.

I believe the 21st century certainly is defined by technology. I believe the 21st century is about brainpower and innovation. It used to be that economic leadership was defined in other ways. Perhaps economic leadership was defined in terms of access to natural resources or the ability to control the seas or control the land. Now, I believe leadership is all about brainpower and innovation. So, for the United States to confidently move forward in the 21st century as an economic leader we, as a nation, need to concentrate on what is necessary for us to be a leader in the world in terms of the brainpower we develop, we attract, we keep, we grow and what is necessary to ensure that we are the leader in innovation in the world in the 21st century.

We have some great examples of brainpower being used and innovation being harnessed to create good for the people in this nation. Just this week, California launched the nation's largest telehealth program in the nation, and it allows doctors and patients to connect remotely through broadband technology. We all knew that this was coming. I can remember Intel long ago stepping to the plate and saying the application of health care and technology is going to be the next revolution. And we now see this happening around our nation and around the world. And on the other side of the spectrum, in repressive regimes like Iran, we now know when a woman is going to be stoned to death because she is accused of adultery because of the ability of people to make sure that the world has access to that information. It is a great example of technology putting pressure on power structures in a way that they perhaps did not anticipate. How wonderful it is that the world knows that a woman is about to be stoned to death.

Now, we're living through tough economic times. And so the decision to lead innovation, the decision to make sure that we are the nation that attracts and keeps the best brainpower in the world, those decisions must be weighed against tough economic times. Technology has suffered and technology jobs have suffered in our nation, along with the rest of the economy. In California, as you know, our unemployment rate is a sky-high 12.3%, and that's important to note because California has been a technology capital for a long time. But since July of 2009, we have lost about 20,000 technology jobs throughout the U.S. Since July of 2008, we have lost nearly 145,000 technology jobs. Now this is the 21st century, and we know that any job can go anywhere. And in the 21<sup>st</sup> century, the jobs that we lose may not come back, and so it is even more vital that we as a nation focus on what does it take to be the leader in innovation and the leader in attracting the best brainpower because, while we have much to work with, we face challenges now in tough economic times. There are challenges from other economic leaders around the world that we must take very, very seriously. We know that our economy, that our nation, has always been driven by innovation and entrepreneurship. And yet there are troubling signs that perhaps we are losing the race in the century of brainpower and innovation.

I believe that we must make a decision as a nation that we will lead in the 21st century industries. And I think that of the 21st century industries there are four that are very important. There may be others, but I focus in my own thinking on four key 21st century industries: energy, including of course green tech, but energy in general; space; infotech; and biotech. These are industries that will drive our economy, and these are industries where today we are not clearly the leader. In some cases we are still

the leader, which is fantastic, but we know that other nations are investing more in some of those key industries than we are. Space technology would be an example, and energy would be an example. Even biotech, despite the fact that we have great centers of biotech research in places like San Diego, there are other nations that are stealing the march. We still remain the leader in infotech today, and we must maintain that leadership. I think we have to make a decision to lead in those 21st century industries, and to do so requires some clear choices.

First, we have to recognize that our companies are competing on a global stage and that we face challenges from nations like India and China who are investing heavily in innovation and in brainpower. Our corporate tax rates are now the second highest in the world. Our tax rates on businesses are now just behind Japan, whose economy was recently surpassed by China. Talking about business tax rates and lowering them is not about rewarding companies that ship jobs overseas; it is about acknowledging the reality that companies go where they are welcome. And the truth is our companies in terms of tax rates, in terms of governments willing to help them form, in terms of access to credit, our companies are now more welcome in some places like China and India than they are in parts of the United States.

I think Japan underscores why we have to make a change in our tax rates. My view is that we need a 25% corporate tax rate in order to encourage innovation. We also have to do away with worldwide income taxation and move towards territorial taxation. That is what virtually every other country has done in the world. We know that there are companies all across America sitting on huge amounts of cash, profits earned overseas. They could use that money to invest in R&D, to invest in plants and new equipment, but they are not using that money because they are taxed on it at huge rates if they choose to try to bring it home.

We also need to approve the U.S. pending free trade agreements. It's vital that our companies are encouraged to export. South Korea is an obvious example to me because California is a center of innovation in one of the 21st century leading industries. We do almost \$7 billion in export business to South Korea every year. That could double if we get the free trade agreement with South Korea signed. There are others that are equally important – of course, Colombia and Panama. But when we make it more difficult for our companies to export around the world, we are holding back our nation's ability to lead.

We know that strong innovation is supported by strong R&D policies. If we are going to decide as a nation that we will be the leader in 21st century industries, that we will do everything we can to support our leading companies around the world, we must also decide that we will be the leader in R&D. And sadly, we are falling behind. California still ranks first among all 50 states in R&D performance and that accounts for more than one-fifth of all the R&D in the U.S. And, interesting, California has had a strong R&D tax credit since 1986 that rewards companies that invest in R&D. You see, there is a direct connection between a tax credit that rewards credits for R&D and the results in California, and we need to think about that example as we look at our nation. As a country, we now rank 17th among OECD nations in R&D credit generosity. We used to be number one. We are now 17th. Twenty years ago we were number one, today we are 17 and, meanwhile, the federal R&D tax credit is not permanent. It expired last December; it has not been renewed. That does not encourage innovation; it does not encourage the creation of jobs in this country. We have to make the federal R&D credit permanent and we have to make it competitive. And I believe it is vital that we as a nation now step up to the plate and say we will have the most competitive, the most generous, the most attractive R&D tax credit in the world. We will once again become number one, and we will make that tax credit permanent, because people, companies, entrepreneurs, innovators, get a very clear signal when our credit is 17th in the

world and its reapproval languishes in a Senate and Congress that does not seem to understand how important a priority this is.

Now in addition to supporting home-grown innovation through competitive tax rates, through competitive tax credits for R&D, and making sure that our companies are encouraged to export because we know that 90% of the markets are outside of this country, we also have to attract the best and brightest brains. The 21st century, as I said at the outset, is all about brainpower and innovation. The nation with the best brainpower and the best innovation is going to win in the 21st century contest for economic leadership. So we have to put huge emphasis on attracting the best and the brightest.

This is a nation that has always led through immigration. This is a nation that has been made vital through immigration. And yet, our visa system for high-skilled workers is in disrepair. I have said that we need a guest worker program that works across the board, and we don't have one, whether it is for farm workers or for high-tech workers. Let me just talk about the visa program for high-skilled workers and the situation that we face today. The current visa system suffers from an accumulation of decades of rules and regulations. We have today 19 different visa categories. There are arbitrary per-country limits and ceilings on different kinds of visas, and there are random lotteries. The system is so arcane and so archaic that no one can understand it. And so it represents a disincentive for the best and the brightest to come here to this nation. It doesn't serve the needs of the 21st century economy or our larger goal of assimilating the best and the brightest of the world's would-be immigrants. We should want the best and the brightest to come here, to have a great idea, to stay and to build a better life for themselves and their families. I think we have to start from scratch. We all know in the real world that sometimes a system gets so complicated, so mired in history, that you have to have a fresh start. I think we need a fresh start, a clean slate and put together a new and much simpler visa system that is flexible enough to accommodate a changing economy and recognizes that in the 21st century it truly is a global race for brainpower.

Now, absent a complete overhaul of this visa system, which will take some time, there are some steps we can take immediately to address some of the most pressing issues that we face and that are getting in the way of our global competitiveness. You are aware, I'm sure, that the U.S. currently caps visas for high-skilled scientists and engineers at 65,000 per year. It is arbitrary, and it is way too low. Paul Otellini of Intel and I have spent too much time, along with other technology CEOs, walking the halls of Capitol Hill, begging for the limits to be raised for H1-B visas, not really knowing whether we were getting anywhere in those conversations, once the limits are approved, finally, in a year. The truth is those limits are reached almost within a day, and we then have to start the process all over again. We should not be threatened by highly skilled, highly educated people wanting to come to this country and work in our 21st century companies. We should welcome them with open arms, and we should do everything possible to make sure they stay here because we are advantaged by the influx of brainpower.

We should also allow international students who complete a degree at a U.S. university in a high-demand field such as science or technology or engineering or math and have a valid job offer to obtain a current green card outside of the existing quotas. When people decide to come here and be educated, we should be encouraged when they stay here to build their life. People frequently ask me, "Well aren't you worried that people are coming here to be educated?" No, I worry when they leave. We need them to stay, and the truth is, having talked to many universities and many students, the signal they get is that we are discouraging them from staying and encouraging them to leave. We need to turn that around and make a green card an easy process for people who have gone through the long process of being educated here and who have an opportunity to be employed here.

So we need to make sure we have competitive tax credits and tax rates. We need to be sure that we are encouraging exports by signing free-trade agreements so we can compete with anyone in the world. We need to make sure we are overhauling our systems so that we attract the best and the brightest in brainpower. We also, however, need to protect our own innovation. And the truth is that we must do two things in this regard to make sure that we are protecting the innovation that our companies and our citizens come up with.

We have to modernize our patent laws. We don't have today strong or predictable intellectual property protection. We don't have a 21st century set of patent laws, and this leaves large and particularly small businesses and entrepreneurs and start-ups without the kind of certainty they need to invest. I'm not sure that you are aware, but we have a backlog today of 1.2 million patents. Obviously a patent system that was created over a century ago has a hard time keeping up with the level and the type of innovation that is going on in the 21st century. We need to overhaul this system as well. We need to make sure that we have a balanced set of intellectual property protections and patent laws so that we can encourage innovation and protect the fruits of innovation. And I believe that we must be far more aggressive, not only in overhauling our patent laws, we must be far more aggressive in protecting our own intellectual property.

I think we need to engage in a tough, realistic conversation, for example, with the nation of China that routinely pirates our intellectual property with no consequence. I must say that having visited and done business in China for many, many years, I think the discussion around Google was quite instructive. We worry as policy makers and politicians about China's human rights violations. But in truth, I believe China is not swayed by our discussions of human rights. What they are swayed by is their own assessment of their commercial self-interest. And I believe that our conversations with China now need to be focused very heavily on our own commercial self-interest, which is to protect our intellectual property. Billions of dollars are being pirated by the nation of China each and every year, and we have to be engaged in a very tough conversation with China about the consequences of their either inability or unwillingness to protect our intellectual property, and their apparent willingness to continue to pirate the intellectual property of our companies.

Now technology, innovation, brainpower, present huge questions for policy makers. And one of the biggest questions that I think this 21st century presents for policy makers -- the century of innovation, the century that will be defined by brainpower and innovation and technology breakthrough -- one of the greatest challenges presented to policy makers is can policy makers keep up? Are our political processes, are our rulemaking processes, are our policymaking processes in Washington able to keep up with the incredible acceleration of technological breakthrough and advancement? Are our processes able to handle the intense global competition and pressure? I think policy makers who are involved in issues of innovation need to step back and think about whether we need to really rethink how policy is made in the 21st century.

I'm reminded of this when I read and look at the conversations that are now going on about net neutrality. Having started my career in the telecom industry, I can tell you that the regulation of the telecom industry over decades has been fairly slow. And I worry that, when regulators begin to say that they want to reclassify broadband to a telecom service, we are truly taking a regulatory structure that was born in the early 20th century, and trying to apply it to an incredible engine for innovation in the 21st century. I think any form of reclassification of broadband as traditional telecom service is bad public policy. I think it will exacerbate the problem we have today where policymakers and policy processes are

unable to keep up with the pace of innovation or the complexity of a global marketplace. And I think we truly need to be engaging in a policy discussion of how do we rethink policy processes? Let me give you an example of what I mean: Several years ago I was asked to testify before a congressional committee on the issue of regulation and innovation, and I made the comment that I thought regulation and regulators now ought to be focused on the floor, not the ceiling. And what I meant by that was that I think regulators frequently get focused on: let's create the absolute best possible structure of regulation or policy. Let's define the ceiling, the best of what we want, and hold everyone to that set of standards. Well, maybe that works well in a slow-moving monopolistic industry such as telecom used to be many decades ago. But it works very poorly in a fast-moving set of industries driven by technology breakthroughs and innovation. A policy process that seeks to regulate at the top cannot possibly keep up with the fast pace of innovation that we were reflecting on at the beginning of my remarks. Just six years ago, Twitter and Facebook did not exist, and yet they have changed our political processes profoundly. So I believe policy makers need to be challenged to think about: what is the floor? What is the absolute minimum that is required? In privacy, for example, let us hold people to those minimum standards and then let innovation and transparency drive the rest.

I think we are having this conference at a very important time. It's a very important time in terms of the rapid pace of innovation. It is a very important time in terms of our place in the global marketplace. It is a very important time in terms of the huge tradeoffs that are going to have to be discussed in Washington going forward. Whatever your party or your persuasion, everyone now acknowledges that a debt of \$13 trillion growing to \$20 trillion in less than five years is going to force policy makers and politicians to contemplate very tough tradeoffs and very tough choices. In an economy that is losing steam, in an economy that is facing now other nations that spend more time and money encouraging innovation than our own, we have some tough tradeoffs to make.

Imagine if you will: Here we are, 21st century, China, India, Israel, other countries moving ahead, and we are 17th in the world in terms of the reward we give for R&D. That doesn't get talked enough about in Washington, DC. In all of the context of the tough tradeoffs that policy makers and politicians will have to make in the coming years about how to create jobs, about how to build better brainpower either by investing in our K through 12 education system or by attracting the best and brightest from all over the world – in all our conversations, because in tough times when cuts have to be made, it's all about priorities. Innovation has to be at the top of that priority list, and frankly, I fear that the fact that the R&D tax credit is now at 17th when it was number one 20 years ago is simply a reflection of policymakers', politicians' priorities. We ought to be standing up and decrying the fact that little by little, we are making it harder and harder for innovators, for entrepreneurs to come here, to stay here, to build here their great ideas into great companies.

This is a nation that has been defined by innovation and breakthrough. This must be a nation that leads in the 21st century in the same way. And therefore, we have to put at the very top of the priority list for our policy makers, for our politicians, how do we restore the leading edge in innovation? How do we make sure we are the nation that attracts the best and the brightest from all over the world? How do we make sure that we have a patent protection system that fits the 21st century? How do we make sure that we aggressively protect our intellectual property around the world? How do we make sure that our political and our policy making processes fit the pace of the 21st century? These are top priority items I believe, and frankly I believe they get far too little conversation in Washington, DC.

I think that is why conferences such as this one are important. It is why I was honored to accept the invitation to chair the board of TPI. It is why I'm grateful that all of you are here to help engage us in this

conversation, and I hope that we will work together to keep these important issues of innovation and leadership and brainpower and 21st century technology at the top of the list in terms of policy makers and politicians in Washington, DC. Thank you so very much, and I'll be happy to take any questions you may have.

## Q&A

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Q: Alan Raul. You mentioned the theft of billions of dollars a year of intellectual property by China every year. There's a cyber security phenomenon called the "Advanced Persistent Threat" which has affected some of our national security concerns. But it's also, as I understand it, affecting companies where we see foreign interests making concerted efforts to steal technology right from the networks in which they intrude. What you think about that, and what do you think Washington and business can do about that?

A: Certainly it's clear it's happening. It's clear that it's impacting our great companies. It's clear that there is a concerted effort to hack into not only national security systems, but competitors' systems. All those things are clear, and the first thing that I believe we must do is to have our government officials acknowledge that in clear and unambiguous terms.

To me, once again, it is about putting the emphasis on the right syllable. I applaud our Secretary of State when she talks in tough terms about China's human rights violations because, of course, we are always concerned about human rights violations. But the truth is that tough talk, in my estimation, has no impact.

To put the emphasis on the right syllable, I wish that she had started with, and that all of our policy makers would start with, a clear, unequivocal acknowledgement that China is engaged in a systematic effort – and it is a systematic effort – to hack into our systems to steal intellectual property, and they are engaged in a systematic effort, a successful effort, to pirate our intellectual property. Let's start by declaring it. Let's use all of our diplomatic resources to talk about that. We have structures that would allow us. Certainly that's a violation of WTO. Many companies in this room worked very hard to advocate on China's behalf to enter the WTO. I think companies need to be unabashed about declaring the same thing, when it is going on. But a company is reluctant to do that without the support of the U.S. government. So I think we have bargaining leverage here. I think we need to use it, but we throw it away when we don't give it the priority or the emphasis that it deserves.

Q: Ed Hearst. You gave a great speech here – five or six years ago, something like that – in this room, and I appreciated that then and your continuing support of this group. It was a very different speech, a different era. It was educational. You talked about tax policy and trade policy among others, and those are areas where the two parties are very different. And you know, in living in the San Francisco area for a very long time, what I've noticed is our representatives in that area and more generally, there's a lot of representatives who represent tech companies but don't vote with the tech companies' interests. And you'll see, R&D tax credit and everyone who was in favor of that who lives in the valley. But in terms of these other issues like CAFTA and tax deferral and all these kind of issues, the representatives who supposedly represent these companies don't vote for these interests and are not held accountable. What are your thoughts? I don't think anything will change until you do that. How do you address that problem where in essence these policies I think you stated are correct but it doesn't matter because the representatives of those companies vote the other way?

A: Well of course the only way that we can change what happens in Washington is to change the people we send to Washington, which is of course why I'm engaged in the pursuit that I'm currently engaged in. But I think you raise a really good point. The truth is someone once asked me what the biggest difference between business and politics was. I've thought about that, and my conclusion is that in politics, you get to make stuff up. In business, you don't. You have facts, you have numbers, you have data, you have decisions. And in politics, sometimes, politicians think that the words are all that matter. In the real world, we do know that actions speak louder than words. Let me just pick on one thing you said: everyone agrees that R&D tax credits are important. Well they may say that, but how is it that our R&D tax credit has fallen from number one in the world to number 17 in the world, and it's not a priority? How is it that our R&D tax credit expired in December, and nobody's talking about it? The truth is, it's not a priority for a whole set of representatives who claim to represent the technology community. Now, obviously the technology community has a choice about voting for their economic self-interest or not. Truly this is a nonpartisan comment I'm about to make: We tend in politics, particularly Silicon Valley has tended in politics, to focus political efforts on social issues. But the social issues are not what is at stake in the 21st century. What is at stake in the 21st century for this nation is our economic recovery and our economic leadership. And in order for us to recover, grow jobs instead of destroying jobs, in order for us to lead, we have to make innovation, brainpower, R&D, entrepreneurship the top priorities of our economic and our political policy. Period.

You made a kind comment about a speech that I gave five or six years ago, and it was about the Renaissance. By the way, I was a medieval history major. And I spoke about the Renaissance because I think that technology provides an opportunity for us as a nation to truly fulfill the promise of the American Dream. So let me just close on that note. This country truly was founded on a radical idea. The radical idea was that everyone has potential. It doesn't matter who you are, how you start, what you look like, what your last name is, or where you come from. Everyone has potential, and here in America, everyone has the right to fulfill that potential. We call that in shorthand the American Dream. Technology is the empowering ability that makes the American Dream possible because technology removes barriers. Technology truly allows people to achieve their potential. When technology destroys the barriers that power structures erect, it provides power to the people, literally. But if we miss the march, if we miss as America the opportunity to step forward and say we will make the adjustments in our public policy, we will make the changes in our priorities that will guarantee that this nation continues to lead in innovation, continues to be the place that everyone wants to come to build a better life for themselves and their families, to create a great idea and maybe start with a little company and turn it into a big company. If we do not make that decision, then little by little, we'll see things happen that we don't like. So little by little what we've seen is the destruction of 145,000 technology jobs in 2008. Those jobs didn't go away, they went somewhere else. Or we've seen us fall slowly from number one to number 17. We have to make this a top priority now. Our economic leadership depends on it, and I think our ability to give the American Dream to everyone who wants to strive for it depends upon it as well.

Thank you so very much, ladies and gentlemen.