

FWS Speech

Council of State Governments

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“Three Ways States Can Accelerate their Competitiveness”

Good afternoon and thank you for inviting me to this prestigious gathering. My friend, Sen. Mark Norris, asked me to share my thoughts with you on ways to enhance the competitiveness of your state, no matter which one you represent.

Three big ways, in my opinion, for creating more competitive states and healthier economies are to:

- Foster technology innovation within our businesses, large and small.
- Train our workforce for innovative jobs of the future, and
- Embrace trade agreements and infrastructure investment. Both will stimulate a more prosperous state economy.

Let’s start with innovation, the holy grail of both businesses and consumers around the world. It’s a topic we live and die by at FedEx—we know it is one of the keys to our continued success as a company. Let me first share with you a bit of history regarding FedEx innovation.

Travel back with me to the year 1973.

- *Popular Science* magazine featured “new take-along telephones.”
- Ads touted new machines that answer your telephone when you’re not home.
- And people rocked out to music on their 8-track players.

Something else happened in 1973 that required both technology and innovation.

- On April 17, 1973, in Memphis, Tennessee, a small company called Federal Express sent 14 small Falcon jets into the night, carrying a total of 186 packages to 25 American cities. On that evening, a new industry was born—an overnight delivery industry.
- Before that, there was no such thing as single carrier, door-to-door service for parcels carried by air. America had put 12 men on the moon, but still didn’t have seamless air express shipping.
- Because of the complex regulations that governed U.S. air cargo at the time, FedEx initially couldn’t use planes that carried more than 7,500 pounds of cargo. (Today our 777 freighters can haul 30 times that amount.)
- That’s why we bought high-technology Dassault Falcon 20 jets for passengers, and modified them to carry cargo.
- But soon after getting our business off the ground, so to speak, we realized these archaic regulations, originally intended to govern railroads, were stifling innovation across America. It was just too hard to move critical goods quickly.

So we led a movement that resulted in the deregulation of the air cargo industry in America in 1977. That innovation let FedEx buy larger aircraft.

- Larger aircraft, in turn, required an entire new generation of technologically advanced package-sorting equipment to handle the growing volumes.
- But there was even a bigger contribution to technology and innovation coming from FedEx.

Early on we realized that information about a package is as important as the package itself.

- Today, of course, we know how critical digital data is in so many ways.
- Back then, few saw its potential, but we realized that having the ability to know where a package is and when it will be delivered would be of great value to our customers.

So we began rolling out industry firsts, powered by technology.

- We introduced the world's first global tracking network for shipments.
- We rolled out the first system enabling customers to electronically request pickups...some 15 years before the World Wide Web.
- FedEx pioneered the use of barcode labeling in ground transportation.
- The FedEx website, fedex.com, was the first to allow customers to track packages on the Internet and create labels from their computers

I realize all this sounds commonplace today, but these were all first-of-a-kind technologies brought to customers by FedEx.

There's a fact of life in technology called "dominant design." Basically, it's about choosing to use those technologies that have proven their dominance in the marketplace.

- Think about that old 8-track tape system I mentioned. It was probably irritating to give up 8-track tapes, or later, audio cassettes, in favor of CDs or another audio technology. But you had to if you wanted to get the latest music because it wasn't being offered on the outmoded technology platforms any more.
- Same thing for businesses. If they stay with outmoded technologies too long, they will fall behind competitors or even go out of business altogether. As author and speaker Ross Shafer said, "If you don't like change, you're going to hate extinction."

We at FedEx have embraced dominant design, evolving our systems to tap the best elements of the new technologies. As a result we give our customers the easiest ways to ship and track packages, and we enable our team members to provide great service, all while reducing costs and energy use.

- For example, technology has helped us cut delivery times and save fuel. In recent years our FedEx Ground operation has cut delivery times by at least one day between more than 25 million U.S. ZIP code pairs, delivering faster to more places than our largest competitor. FedEx Express has reduced many intercontinental delivery times with its new long-range Boeing 777 freighters. And FedEx Office provides SameDay City service in 23 cities.

So far I've talked about FedEx innovations, but examples abound in every industry.

- With its iPod and iTunes, Apple changed the way we listen to music.
- Embedded sensors are revolutionizing the way we keep up with many things. How many of you have a Fit Bit to keep up with your activity levels? Another example: According to Forbes magazine, a new product under development called PulseWallet uses an embedded reader to identify a user, based on a reading of a single vein in his or her palm. More secure than even a fingerprint scan, the PulseWallet will facilitate mobile payments by linking the user's palm print to stored credit card information. No pin number, no card needed.

All of this leads us to the question, "How can we foster innovation within our businesses? There are many answers to that question, but three factors stand out in my mind.

First, focus and refocus. Know what compels you as a company. This will guide the passion and perseverance of your leadership and employees toward the achievement of your goals. By creating clarity out of what may seem like chaos, you're making sure that your people spend their creativity on the important things.

Second, grow a positive company culture.

- At FedEx we have something called the Purple Promise, which, as every FedEx team member knows, states, "I will make every FedEx experience outstanding." Our people are encouraged to come up with new or improved ways to serve our customers.

- We reward new thinking, particularly if it makes our customers happier or saves money. We're willing to test ideas, realizing that even if it doesn't succeed, we will have learned something in the process.
- Daniel Vasella, former CEO of Novartis, said it astutely, "Personally and professionally, conformity is not important. What is crucial, once one sees a new innovative way, is to test it out, to get both challenge and support from competent people."

Third, borrow ideas, business models or processes from other fields.

- In the early days of flight, most people trying to build flying machines, concentrated on how birds flapped their wings. But the Wright brothers were bicycle builders. They used the principle of balance, so critical to riding a bike, to the building and flying of an airplane.
- Knute Rockne got the idea for his "four horseman" backfield shift while watching a burlesque chorus routine.
- Military designers borrowed from the cubist art of Picasso to create more efficient camouflage patterns.
- Long-time business guru Rosabeth Moss Kanter advocates what she calls kaleidoscope thinking to come up with innovative solutions. She described it as shaking up your thinking to permit an array of different patterns from the same bits of reality—much as you do when you twist a kaleidoscope to see new patterns.

The point is that great ideas are lying about. Pick them up from far-flung fields, look at them, adjust the kaleidoscope, and find brilliant solutions.

A second way states can sharpen their competitiveness centers on workforce training to fill the innovative jobs of today and tomorrow.

- A 2012 study by the McKinsey Global Institute reported that by 2020, employers worldwide could face a shortage of 85 million high- and medium-skilled workers.
- Even with intensifying demand for highly skilled workers, the number of graduates in fields fueling the innovation economy is stagnating. While absolute numbers of degrees awarded in STEM fields have increased modestly, there's been flat to decreased growth in some key areas. In computer science, for example, bachelor degrees have declined, especially for women and minorities.

What can we do then to produce qualified candidates to fill jobs so vital to the U.S. economy?

- One way is through business and education partnerships. An organization called the Business Higher Education Forum partnered corporations with universities in several states to create specialized job-targeted curricula.
 - In the Maryland/Washington D.C. area, Northrup Grumman partnered with the University of Maryland to develop a cybersecurity program, given the proximity of federal agencies such as the National Security Agency and the department of Homeland Security.
 - In Ohio, data science is the focus for programs developed by Ohio State and Case Western Reserve University with multiple corporate sponsors.

- In Wisconsin, the Water Council and the University of Wisconsin paired up to create a water science curriculum.

I have to say this group is truly leading the charge when it comes to innovative training programs particularly in STEM fields. Senator Marcellino said it well: “The workplace is changing rapidly, making it imperative that we develop innovative ways to educate and prepare our students for the demands of an increasingly diverse and global culture and economy.” Let me cite a few examples of various state initiatives.

- South Carolina is pursuing apprenticeship programs. It offers a \$1,000 tax credit to employers per apprentice and aggressively markets apprenticeship through its technical colleges.
- Iowa has appropriated \$5.2 million, combined with an almost matching amount from the private sector, to promote exemplary STEM programs statewide. The state put these programs in the hands of 3,000 teachers who touch some 100,000 kids. Also, in Iowa, Lt. Governor Kim Reynolds launched the Million Women Mentors program, a national effort to recruit one million male and female mentors in STEM fields to increase the interest and confidence of girls in high-tech jobs.
- In my home state of Tennessee, Senator Norris has spearheaded the State Pathways to Prosperity initiative. It emphasizes education and training for veterans, youth, job seekers with criminal backgrounds, and those who are food-insecure. The state has also set a goal of getting at least 55% of Tennesseans to have a certificate or degree by 2025.

Within FedEx, we have a number of programs that seek to prepare students for the jobs of the future. Let me mention just a couple.

- Given the fact that we have more than 650 aircraft, the largest all-cargo fleet in the world, we have an urgent need for aircraft mechanics. So we partner with community colleges in the hub cities of Memphis, Indianapolis and Los Angeles areas to provide aviation maintenance education. These three-month paid courses allow college students to learn about the work of an airline mechanic, observe airline operations, and gain a supervised real-life work experience. This program has helped prime the pump of mechanic job candidates as many of our Baby Boomer mechanics retire.
- Another unique program FedEx supports is the First Robotics competition. Inventor and my personal friend Dean Kamen founded an organization called “For Inspiration and Recognition of Science and Technology,” better known by its acronym FIRST. Its goal is to inspire young people’s participation in science and technology.
- FIRST sponsors a world championship robotics competition, in which teams of students around the world build and program robots and submit them to the annual contest. FedEx ships out all the robotics tool kits free to the hundreds of teams, then ships the finalists’ robots to and from the competition. Last year, 600 teams went to finals.
- FedEx also sponsors something called the Innovation Challenge. It’s a social media-based competition consisting of math and science problems, scavenger hunts and photo ops, FedEx innovation trivia, and more. The winners of the Innovation Challenge receive grants and prizes to assist with their robot builds. All told, our contribution exceed over \$1 million in retail

value. Best of all, we are helping to pique young people's interest in technology, become more familiar with FedEx, and have fun at the same time.

The third way states can increase their competitiveness is through broader participation in global trade. After all, 95% of the consumer market lies outside the U.S. I know all of you have companies large and small already doing business with international customers. But certain challenges of overseas trade really stymie further growth. I'm talking about hurdles such as protectionism and customs clearance.

- For instance, China has a protectionist policy called "Indigenous Innovation" which favors Chinese nationals and penalizes foreign firms perhaps in the form of tariffs or appropriation of international intellectual property.
- Regarding customs clearance, we ship in and out of more than 200 countries, and clearance rules are different in each. Packages can be held up if they are coded incorrectly or the country of origin isn't listed. Some countries don't accept electronic data, so reams of paperwork have to be submitted instead.

At FedEx trade is our business.

- We know firsthand how the customs processes and conflicting trade rules make it difficult, particularly for small and medium businesses, to engage in international commerce.

- And we've also seen firsthand that lowering barriers such as tariffs and bureaucratic red tape helps entrepreneurs and companies expand their businesses and reach new customers who want access to American goods.
- That's why we very much support the Trans-Pacific Partnership or TPP.

We believe the TPP is a landmark trade agreement that promotes economic integration and dramatically expands opportunities for all businesses in the 12 member-countries. *(U.S., Canada, Mexico, Singapore, Australia, New Zealand, Japan, Vietnam, Malaysia, Brunei, Chile, and Peru)*

- The TPP establishes commitments and performance standards for all its members. One of those would hold customs administrations to common standards including automation and pre-arrival processing. That leads to better risk management and faster clearance of goods.
- Given the rapid growth of cross-border e-commerce, quicker goods movement will help drive that growth even higher. And that's a boon for so many industries and businesses in your state.
- With the trade expansion spurred by the TPP, demand for American exports will grow and in turn stimulate business investment here in the U.S.
- Now if you track the relationship between business investment and job growth, they run on a parallel track: the more businesses invest, the more jobs are created.
- Over time, the TPP will help U.S. businesses that trade internationally thrive.

A corollary to the anticipation of greater trade is investment in American infrastructure. If we don't modernize our transportation networks, we won't get

goods to market efficiently. As you know, we have an aging network of roads, bridges, ports and some airports that negatively affect our businesses' operations in terms of product delivery and inventory costs. Here are some examples of negative impacts:

- Safety is the first priority for all transportation, and aging infrastructure is more likely to heighten the risk of accidents.
- Old infrastructure may cause accelerated wear-and-tear on equipment such as vehicles and trailers.
- Traffic delays and road or bridge closures cause an increase in the number of hours and miles spent on our highways, which can lead to increased fuel consumption and maintenance costs.
- FedEx supports a solid highway bill that prioritizes investment in critical projects such as freight corridors and intermodal highway connectors. Such a plan should designate adequate sources of funding for both immediate and long-term needs. We urge state governments to support such a plan as the payoff is a more competitive U.S.

FedEx knows the power of connecting the world, and we know you want every business and entrepreneur in your state to feel that power as well. That's why it's important to encourage innovation in organizations across the states. That's why it's important to train your workers for innovation jobs. And that's why it's important to advocate for trade agreements that simplify international trade for businesses of all sizes.

These approaches get ideas, products and services to markets in more countries. They help make our states more competitive in the global marketplace. Ultimately, they stimulate more jobs and boost not only state economies but the economy of all of America as well. That is a goal worth working toward!

Thank you.