BILL FORD
TED CONFERENCE
FULL SCRIPT VERSION
DRAFT – 02/27/11

SLIDE 1 (BLANK)

Thank you. Good morning. I am excited to be here, and to have the opportunity to share some thoughts with you.

By birth and by choice, I have been involved in the auto industry my entire life. For the past 30 plus years, I've worked at Ford Motor Company.

And for most of those years, what I've worried about, is how I'm going to sell more cars and trucks. But today, I worry about what will happen if all we keep doing is selling more cars and trucks.

What happens when the number of vehicles in the world doubles? Triples? Or even quadruples?

Let me start by giving you a little background, so you have an understanding about where I am coming from.

My life is guided by two passions:

The first is automobiles.

I literally grew up in the Ford Motor Company. I used to think it was so cool when my dad would come home with the latest Fords or Lincolns and then leave them in the driveway. I decided about that time – about age 10 – that it would be really cool if I was a test-driver.

So, my parents would go to dinner… they'd sit down… and I would sneak out of the house. I'd jump behind the wheel and take the new model around the driveway. And that went on for about two years until – I think I was about 12 – my dad brought home a Lincoln Mark III. And it was snowing that day. So I thought it would be really cool for me to do donuts and maybe even some figure eights out in the snow… so, I was out doing my thing and my dad finished dinner early that evening. And he was walking out the front door just about the time I hit some black ice and met him at the front door with the car and almost ended up in the front hall. So it kind of cooled my test driving for a little while – but I really first started to love cars then.

My first car was a 1975 electric green Mustang. And even though the color was pretty hideous, I really loved the car and it really cemented my life-long love affair with cars– which continues on to this day. Cars really more than a passion; they're quite literally in my blood.

SLIDE 2 (HF QUOTE)

My great-grandfather was Henry Ford, and on my mother's side, my great grandfather was Harvey Firestone. So when I was born, I guess you could say that expectations were kind of high for me. But my great grandfather Henry Ford really believed that the mission of the Ford Motor Company was to make people's lives better and make cars affordable so that everyone could have one because he believed that with mobility comes freedom and progress – and that's a belief that I share.

[pause]

SLIDE 3 (STREAM PHOTO)

My other great passion is the environment.

And as a young boy, I spent a lot of time outdoors in northern Michigan, and fish in the same rivers that Hemingway fished in and then later wrote about. And it really struck me – as the years went by – in a very negative way when I would go to some stream I loved and used to walk in a field that used to have fire flies and now had a strip mall or a bunch of condos on it.

Even at a young age, that really resonated with and the whole notion of environmental preservation – at a basic level – sunk in with me.

And then as a high-schooler, I started to read authors like Thoreau, Aldo Leopold, and Edward Abbey. And I really began to develop a deep appreciation for the natural world.

But I never really occurred to me that my love of cars and my love of nature as being in conflict with one another – and that was true until I got to college…

SLIDE 4 (CHALKBOARD)

And when I got to college, you could imagine my surprise when I found myself in class being taught by professors would say my family – and Ford Motor Company – were examples of everything that was wrong our country.

They thought were more interested as an industry in profits rather than progress. That we filled the skies with smog… And frankly, we were the enemy.

So with that uplifting background…

But it did make me think… but I joined Ford after some soul searching to determine if this is what I really wanted to do…I decided I wanted to go to the company and try to effect change there. As I look back now, a little over 30 years ago/ it was probably a little naïve to think I could do so – but I wanted to try. And discovered that my professors weren't completely wrong. In fact when I got back to Detroit, my environmental leanings weren't exactly embraced by those in my own company and my industry.

SLIDE 5 (WHQ PHOTO)

In fact, to say that my environmental beliefs were not widely accepted in the auto industry would be an understatement. I had some very interesting conversations, as you could imagine. There were some who believed all this "ecological nonsense" was being driven by "environmental wackos" – and that's an exact quote.

At that time I was considered a radical. And I won't forget the day that I was brought into a bunch of executives and asked stop associating with any known or suspected environmentalists.

But I didn't. I kept speaking out… trying to get people to understand that the impact we were having on the environment… what we now call sustainability…

In time, my views went from controversial to more or less consensus today. I think most people in the industry today believe we've got to get on with it.

[pause]

SLIDE 6 (PROGRESS ARROWS)

The good news today is that we are tackling the issue of cars and the environment, Not only as company but as an industry.

We have taken pollutants out of tailpipe exhaust, and are pushing fuel efficiency to new heights. And with the help of new technology, we are reducing – and I believe will someday eliminate – CO2 emissions out of tailpipes.

We are beginning to sell electric cars, which is great– and developing alternative powertrains that will make cars affordable in every sense of the word – economically, socially and environmentally.

And actually, although we have a long way to go and a lot of work to do -, I can now see a day when my two great passions – cars and the environment – will be in harmony.

[pause]

But unfortunately, while we are on our way to solving one monstrous problem – as I said we're not there yet, we've got a lot of work to do… another huge problem is looming and people aren't noticing.

The freedom of mobility that my great grandfather brought to people, is now being threatened – just as the environment is.

SLIDE 7 (9B PEOPLE BY 2044)

The problem – put in the simplest of terms – is one of mathematics.

Today, there are approximately 6.8 billion people in the world today. Within our lifetime, that number is going to grow to about 9 billion.

At that population level, our planet will be dealing with the limits of growth.

And with that growth comes some severe practical problems – one of which is our transportation system simply will not be able to deal with it.

SLIDES 8/9 (AUTO BUILD – 800M TODAY TO 2-4 BILLION)

When we look at that population growth in terms of cars, the problem is clear.

Today, there are about 800 million cars on the road worldwide.

With more people and greater prosperity around the world, that number could grow to between 2 and 4 billion vehicles – by mid-century.

And this will create a kind of "global gridlock" that the world has never seen before.

[pause]

SLIDE 10 (CALENDAR)

Think about what this might do to our everyday lives.

Today, the average American spends the equivalent of almost a full week, every year, stuck in traffic jams. And that's a huge waste of time and resources.

But it's nothing compared to what's going on in the nations that are growing the fastest.

SLIDE 11 (BEIJING TRAFFIC)

Today, the average driver there has a five-hour commute…

And last summer, you probably all say this – there was a 100-mile trip that took 11 days to clear.

In the decades to come, 75 percent of the world's population is expected to live in cities – and that 50 of those cities will have more than 10 million people – you can really begin to understand the size of the issue we're facing.

[pause]

SLIDES 12-14 (MOBILITY MODEL, 4B = 4B, GREEN TRAFFIC = TRAFFIC)

When you factor in the expected population growth, it becomes very clear that the mobility model we have today, simply will not work tomorrow.

Frankly, four billion clean cars on the roads are still four billion cars,

And a traffic jam with no emissions… is still a traffic jam.

[pause]

So, if we make no changes today, what does tomorrow look like?

I think you already have the picture

SLIDE 15 (TRAFFIC JAM PHOTO)

But while traffic jams are a very visible symptom of this challenge, they are merely an inconvenience but that's all they are… but the bigger issue is - global gridlock will stifle economic growth – and that our quality of life will be severely compromised.

[pause]

So, what will solve this?

The answer won't be more of the same.

SLIDES 16-17 (MUSTANG BUILD SLIDES)

My great-grandfather once said… before he invented the Model T… that if he had asked people what they wanted when he started his company, the answer would have been, "faster horses."

So, the answer to more cars is not to have simply more roads.

SLIDE 18 (BLANK)

When America began moving west, we didn't add more wagons, we built railroads.

When we needed to connect our country after World War II, we didn't add more two lane roads, we built the interstate highway system.

Today we need that same leap in thinking for us to create a viable future.

[pause]

Yes, we are going to build smart cars. But we also will need smart roads, smart public transportation systems, parking and more. We don't want to waste out time and energy stuck in traffic, waiting in toll lines, or looking for parking spots.

SLIDE 19 (SUSTAINABLE MOBILITY)

What we need is an integrated system that uses real-time data to optimize personal mobility on a massive scale… without hassles or compromises for travelers….and frankly, that is the kind of system that will make the future of personal mobility sustainable.

[pause]

Now, the good news is that some work has begun… in different parts of the world.

SLIDE 20 (MASDAR POD CARS)

The city of Masdar in Abu Dhabi uses driverless electric vehicles that communicate with one another… and go underneath beneath the streets with a series of walkways above.

SLIDE 21 (NY 34TH STREET TRAFFIC)

On New York City's 34th street, gridlock will soon be replaced with a connected system of vehicle-specific corridors.

Pedestrian zones will work together with dedicated traffic lanes for buses and private vehicles – to help reduce the cross-town trip from about an hour today at rush hour to 20 minutes.

SLIDE 22 (HONG KONG OCTOPUS ELEMENTS)

If you take a look at Hong Kong – they have a very interesting system called Octopus there… it's a very interesting system. It's another example of a network of transportation options tied together by a single payment system.

It doesn't matter if you are parking downtown, taking a bus to work…or a train – they all operate within the same system.

SLIDE 23 (SHARED CAR WORLD MAP)

And shared car services are launching in urban centers around the world. These efforts are great - relieving congestion and saving fuel.

[pause]

These are all great ideas that are helping us move forward. But what really inspires me is what will be possible when our cars can begin talking to each other. Very soon, the systems we use to beam music and entertainment and GPS information into our vehicles are going to be used to create a smart vehicle network.

Every morning, I drive 30 miles from my home in Ann Arbor to my work in Dearborn, Michigan. And every night, my commute home is a basically a crap shoot, and I often have to get off the highway and look for different ways to make it home.

SLIDE 24 (V2V "TALKING CARS" PHOTO)

But very soon we will see the day when cars are essentially talking to each. If the car ahead of me on I-94 hits traffic, it will alert my car to reroute and tell me how to get home in the quickest possible way. These traffic management systems are being tested now. They will be ready for prime time pretty soon.

But the potential of a connected car network is almost limitless. Just imagine…

The day you can plan a trip downtown – your car will be connected to a smart parking system – where you can reserve a parking spot before you arrive. No more driving around looking for one… which is frankly is one of the biggest uses of fuel in today's cars in urban environments.

Or being in New York and tracking an intelligent cab on your Smartphone so you don't have to flag one down in the cold…

Or being at a future TED conference… and having your car talk to the calendars of everyone here… and telling you when you have to leave when the conference is over… and the best route to take… so that everyone can arrive at their next destination on time.

This is the kind of technology that will merge millions of individual vehicles into a single system.

[pause]

SLIDE 25 (PHOTO COLLAGE OF POTENTIAL SOLUTIONS)

It is clear that we have the beginnings of a solution to this enormous problem. But, as with addressing CO2 issues and also fossil fuels, there will be no silver bullet.

The solution will not be more cars, more roads or a new rail system. It can only found in a global network of interconnected solutions.

[pause]

SLIDE 26 (BLANK)

I know we can develop the technology that's going to make this work. But we have to be willing to go out there and seek out the solutions.

Whether that means vehicle sharing or public transportation – or some way we haven't even thought of yet – our overall transportation mix and infrastructure must support all the future options.

We need our best and brightest to start entertaining with this issue.

Companies, entrepreneurs and venture capitalists – they all need to understand that this is a huge business opportunity, as well as an enormous social problem. Just as these groups embraced the green energy challenge – and it's really been amazing for me to watch home much brain power and money has poured into the green energy field, must now start thinking about attacking global gridlock with the same passion.

We need our leading thinkers – people in this room – and policy experts to take up this challenge. Frankly I need all of you thinking about how you can help solve this huge issue. And we need people from all walks of life. Not just inventors – we need policy makers. And government officials to think about how they're going to respond to this challenge. This isn't going to be solved by one person or one group. It's going to really require a national energy policy – frankly for each country – because each country's solutions are going to be different based on income, traffic jams, and also how integrated the systems already are. But new need to get going and we need to get going today. And we must have a public infrastructure designed to support a flexible future.

[pause]

We have come a long way. Since the Model T, most people didn't travel more than 25 miles from home in their entire lifetime. Since then, the automobile has allowed us we the freedom to choose where we live and work and play – and just to go out and move around. We don't want to regress and lose that freedom.

We are on our way to solving – although we've got a long way to go still – the one big issue that threatens it: the environmental issue.

Now we must turn all our effort and ingenuity and determination to solving the looming issue of global gridlock. Because in doing so, we're going to preserve what I think we take for granted and enhance our incredible freedom of mobility… and the quality of our lives if we fix this.

Because if you can envision – as I do - a future of zero emission, easy moving transportation is worth the hard work it will take today… to make it a reality tomorrow. I believe we're at our best when confronted with big challenges. This is one that won't wait, so let's get to work now. Thank you.