- Hello. I'm Larry Mishel, the president of the Economic LM: Policy Institute. Welcome to this forum of the Agenda for Shared Prosperity. We believe that the economy has been broken for some time. You can see that in the fact that over this last business cycle from 2000 the typical family, the typical worker saw no improvements in income or wages despite a large increase in productivity and the economy expanded. That's kind of the good news because now we're headed into a recession or a downturn or at least we're going to be seeing steadily rising unemployment all during the year which helps set the frame for thinking about infrastructure and all these other types of investments because they not only can help stimulate the economy in the short run but they also can be part of a long term growth program.
- And given when you have an asset bubble burst sometimes it's followed by long periods of very stagnate growth. We don't know how this is going to play out but that's a possibility. It may be that we are looking for a large source of growth in the future. So I think this is a topic both in the immediate term and in the longer term for our

country. But it's my role here today to introduce Governor Rendell, who's the 45th governor of Pennsylvania and just recently elected in a landslide for a second term. He's formally a two-term district attorney of Philadelphia, twoterm mayor of Philadelphia.

- The New York Times said that Rendell oversaw the most stunning turnaround in recent urban history. He's been the head of the DNC. He's the future head of the National Governor's Association. He's been a leader in getting economic growth in Pennsylvania, doing such great things as raising the minimum wage, being a leader in early childhood education and in creating jobs in alternative energy and a leader in the country on that.
- More recently what brings him here today is that he's become a powerful voice for infrastructure investment partnering with Governor Schwarzenegger and Mayor Bloomberg in a new not for profit organization called Building America's Future which will include private sector associations and individuals and according to the governor it's going to go everywhere to beat the drum for infrastructure for

America's future. And I think he was much in the public eye in recent weeks on matters I won't discuss today, but that's all very impressive, but not as impressive as what I'm about to tell you.

- Now I'm not sure that a Washington audience can really appreciate the extent of knowledge, insight and fairmindedness that Governor Rendell brings to matters. I am a native Philly boy, as anyone who spends more than a little bit of time with me knows. And what you don't know is that I regularly watch the governor on television to hear his perspective which I have always found informed, straightforward and insightful. I think the governor knows where I'm going with this. In fact I do so after every pre-season, regular season and playoff game that my beloved Eagles play. For those of us that bleed Eagles green we think of him as the "guv," the guy chatting with "V Heb," Van Hebron and "R. Diddy," Ray Diddinger and the Comcast post-game show. So you can understand what an honor it is for me to introduce the "guv."
- ER: Hello everyone. My second to last year as mayor, Comcast called me and said would you, I was known to be a big

sports fan, would you like to commentate on the Eagles after the game during a post-game show? Sports writer, former player, moderator, you'd be there to give the fans' perspective. So I said sure why not. They were actually willing to pay me. As mayor, I couldn't take the money. So I donated it to charity. And I remember midway through the first show, it was about two after the game, about a two hour block. I thought people actually get paid for this. I mean there was a bunch of guys sitting around talking about football. It was unbelievable. But sports, at least in Philadelphia, and I would assume from what I know about the Redskins sports is as conspiratorial as politics.

This morning I heard someone up on a talk show that the Clintons had paid Reverend Wright to go on his recent speaking tour, somewhat a cynical view of life. But I also heard people suggest that the reason that Eagles traded out of the first round for the second straight year is because management didn't want to pay first round bonuses. For those of you who aren't football fans, if you're drafted in the first round you automatically get a big signing bonus. If you're

drafted in the second round, you get virtually no signing bonus. So there are conspiratorial theories everywhere except in infrastructure because heretofore it hasn't been sexy enough to attract any conspiratorial theories. I am an infrastructure junky.

- When I was the mayor of the city of Philadelphia… well first of all you cannot be a mayor of an older American city without being an infrastructure junky. I remember a day, a time in Philadelphia when we had about 44 straight days of subfreezing weather. That seems impossible these days, but 40 straight days of subfreezing weather, and on the 45th and 46th day it was 65 degrees. You know what happened to most of the water pipes in this city? They burst. Why? Because they were laid in the 19th century. They were laid about four or five or six inches beneath the ground with no modern insulation etc.
- The infrastructure of our major cities as New York learned when the steam pipe blew up last summer, the infrastructure of our major American cities is just a few years away from total devastation and total crumbling, and we seem to just

bump along and not do much about it because we can get through this next budget cycle. We don't have to spend any money on infrastructure. We'll do it some time in the future. Well I don't know how many of you are old enough to have seen the old frame oil filter commercials where this sleazy looking mechanic stands up and holds a frame oil filter that says you can pay me now and the screen flashes \$4.99, or you can pay me later, and you see this dilapidated car and the screen flashes \$3,972. But that's what infrastructure is like, and we have deferred doing something about our infrastructure to the point that it is almost too challenging and too daunting to do something about. But if we sit here and do nothing for the next 30 or 40 years it will be too late for America.

Infrastructure is a quality of life issue, as anyone who sits in traffic can tell you. I remember, of course this is our own fault. One day I was down here and then I had to go to Maryland, to Annapolis for a fundraiser and I took... I forget. You all know what road I took, but I was with two state troopers and that qualified us for going in the HOV lane. The HOV lane actually only required two people. The

bulk of the cars were stuck in mind bending traffic going nowhere. We cruised along. We were the only car in the HOV lane for 30 minutes, the only car, and everybody is over there. It's certainly a quality of life. Are we going to get our lives back? Are we going to get an hour or an hour and fifteen minutes of our life back? It's a public safety issue as we learned in Minnesota.

- An infrastructure or failure to deal with our infrastructure can have incredibly damaging consequences, and it's not just Minnesota. It's everywhere. I delivered my budget address on February 5, and I called for a program to rebuild Pennsylvania's infrastructure, and literally three days later on Friday the Birmingham bridge in Pittsburgh, which carries 23,000 vehicles a day dropped eight inches. And for those of you who know bridge and bridge construction, dropping eight inches means it was very close to going down.
- About six weeks later I-95 in Philadelphia a concrete pillar that is one of the peers that holds up a bridge on I-95 was discovered it had a crack wide enough in it to put several

dictionaries through. It was a very large crack. I-95 that road carries about 180,000 cars a day. That road was closed for three days, and when you stood on the highway and saw the city in the foreground it was almost like one of those horror movies where everyone in the world had died and there was no one on the streets. It was shocking to think about but also shocking to think about what happens if that peer had collapsed and the bridge had collapsed itself. It would have made what happened in Minnesota look like something that was moderate in its scope.

So it's certainly quality of life. It's public safety. It is economic because it has tremendous economic development consequences. If workers are stuck in congestion, they can't be on the job and it cuts productivity. But even more importantly goods movement is a key to economic viability in the 21st century. And when I talk about infrastructure people always think about roads and bridges, or roads, bridges, and highways. Well it's so much more than that. There are airports and ports and things like that. There are non-transportation infrastructure, water and sewers, dams, other things that go into the American

infrastructure. But let's just take our ports for a second.

- Our ports are very important particularly as the global economy becomes the dominant factor in economic health. When we did our press conference announcing Building America's Future, Governor Schwarzenegger, Mayor Bloomberg and myself, we did it on an island in the middle of one of the freeways in California, somewhat scary experience, but even at ten in the morning on a Saturday it was pretty scary. I brought one visual aide because I knew what Governor Schwarzenegger and Mayor Bloomberg would be referring to.
- I brought a map that depicted the ten largest ports in China and the ten largest ports in the United States. The throughput comes through those ports. In the ten largest ports in China, they handle three times as much tonnage as we do in America because their ports are in so much better shape. They've modernized their ports. Only two American ports would handle enough tonnage to be in the top ten in China, New York-New Jersey and LA-Long Beach, only two of our ten. It's extraordinary.

- You look at rail systems. Well one of the reasons that our airline industry and our air traffic is in such terrible shape is we have no high speed rail. We're the only modern country in the world that doesn't have high speed rail. We should not be flying from cities that are less than 500 miles from each other. We should be taking high speed trains. Mayor Bloomberg told us about when he was in Shanghai recently. Shanghai Airport is as far away from the downtown. He took the bullet train into the city and it moved 270 miles an hour. Can you imagine a train moving 270 miles an hour? You can get from New York to Washington in less than an hour. I mean think about it.
- Even if we fixed up the track and the electrification on the Acela (Acela Express), you could get something that's clearly within our economic means at this point. You could get from New York to Washington in an hour and 40 minutes. If you got to New York and were able to go from Washington to New York in an hour and 40 minutes you would end the shuttle. There are days when you get through airport security in an hour and 40 minutes. Why would anybody take

the shuttle? And if you end the shuttle think of what that does for LaGuardia, for Newark, for Philadelphia, for BWI. It's unbelievable what that would do for air traffic and we're not even talking about fixing the Acela (Acela Express) much less anything else. And the interesting thing about mass transit, I know I'm sort of going all over the map here. But the interesting thing about mass transit, it used to be people said, "Ah Americans are wedded to their car."

We Americans don't want to have to live by a train schedule. We want the freedom to leave any time we want. Well we're finding with congestion that that freedom doesn't mean very much, number one. And number two, we're finding with rising oil prices and again I watch far too much cable TV, but I heard last night on cable TV that we may be approaching in a year from now \$10 a gallon gasoline. Apparently in some European countries they're paying nine dollars a gallon right now. So as all that happens, people are taking another look at mass transit of all sorts.

We have a train line that goes from Philadelphia to Harrisburg. It makes five stops in between. Governor, my predecessor put some money into fixing it up and matched by Amtrak and ridership went up. And when I became governor, Amtrak and the Commonwealth joined in and we put about \$40 million into the pot, joined in to do something with the electrification of the track and we cut the time from two hours to an hour and a half. And we have gone in three years from 898,000 riders to 1.25 million or a quarter riders in just 3 years. If we make it better, no riding. I have absolutely no doubt about it. And the time to do all of this is now. The sad part is that we waited so long. We decided to pay them later. We waited so long that we can barely fix up what we have no less build anything new.

The American Society of Civil Engineers estimates the infrastructure gap in this country as \$1.6 trillion, not surprising. Other G7 nations that have had massive infrastructure or repair programs have spent a trillion dollars. Japan and Germany spent a trillion dollars, countries fraction of our size, \$1.6 trillion, but what the

American Society of Civil Engineers is computing is what it would cost to bring what we have into first rate condition, not to build anything new. Think about that, 1.6 trillion just to make what we have passable. And let me give you an example.

- The reason I think that Governor Schwarzenegger, Mayor Bloomberg and I are good people to head up this organization is we've each been in our own way trying to fight the infrastructure battle. Governor Schwarzenegger has persuaded California voters, that unique breed, has persuaded them to vote for a \$42 billion infrastructure bond, \$42 billion. Mayor Bloomberg, you all have read about some of the things he's done. He's increased five fold the money that New York is spending on infrastructure and looking to the future of the city. And in Pennsylvania we have been fighting the infrastructure fight for a long time.
- I served when I was mayor of Philadelphia as the chairman of the Rebuild America which was a mostly private sector oriented group. So I've been working on that infrastructure for a while. And in Pennsylvania I have tried to address

infrastructure in many different ways. We fought long and hard to get a transportation bill through last year that allocates an additional billion dollars on top of what we were spending on an annualized basis on transportation at best. When I became governor, governor elect, I was handed a whole lot of lists and there were very few lists where Pennsylvania was number one. And one of the lists was the number of structurally deficient bridges in the country.

We had 5500 structurally deficient bridges, and when you say structurally deficient that covers the gambit. Some of them are in desperate trouble. So I over my first five years, notwithstanding the fact that I inherited a \$2 billion plus deficit, I tripled the funding that we spent on a yearly basis on bridge repair from \$202 million to about \$600 million a year on bridge repair. After five years of that increase in funding, we didn't have 5500 structurally deficient bridges anymore. We had 6,000 because Pennsylvania also leads the nation in bridges 75 years of age or older. And every time we fix two, three come online as structurally deficient.

- It is absolutely impossible without a massive spending program for us to deal with that problem. I-95 in Philadelphia, I-95 traverses through Philadelphia for 18 miles. In that 18 miles to prepare the bridges that support part of those 18 miles would cost \$3 billion alone, \$3 billion alone. My departments estimate that just to repair our infrastructure and get it to adequate conditions would be 9.8 billion which if you think about the \$1.6 trillion national gap makes a lot of sense.
- Now when you think about figures like that, does the city of Philadelphia have \$3 billion to repair the bridges on I-95? Of course not. Doe the state of Pennsylvania have an extra \$10 billion that it can throw into rebuilding its infrastructure? Of course not. Where will you look? Well I would suggest the first place to look and not the only place, but the first place to look is to the federal government. Our federal government unlike most of the developed nations in this world does a lousy job in supporting this nation's infrastructure.

- Think about it. When Dwight David Eisenhower left office in 1960, the 12.5 percent of the non-military domestic spending in the United States was on infrastructure, 12.5 percent. Today 2.5 percent of the non-domestic spending, on the non-military domestic spending is on infrastructure. We've dropped by almost 80 percent. Just in 1987, 20 years ago, we spent 1.17 percent of our GDP on infrastructure. Today we spent .57 percent of our GDP on infrastructure. So at a time when we need spending to increase dramatically it's decreasing. State and local governments account for 75 percent of infrastructure spending.
- If you know anything about state and local taxation, we're basically all at the limit. There's very little give left in what state and local government can put into raising taxes for infrastructure. So it has to, in my judgment, come from a number of sources of which the federal government has to be in my judgment the leader. There is no doubt about it if we were going to do it. Go back to that .57 of our GDP that we spent on infrastructure. Contrast it to China and India which spent nine and eight percent of their GDP on infrastructure.

- Now you might say, well come on Governor, they're emerging nations. They have to build their infrastructures, so it's going to cost them more. Okay. Then explain why Spain is spending ten percent of its GDP on infrastructure and the EU spends 3.5 percent of its GDP on infrastructure, notwithstanding that most of the EU and all of the G7 have recently undergone infrastructure repair programs. We need to do this. We need to do this. And there are a number of ways to do it. First can we look to the private sector for help? Yes, we can. Is the private sector the total solution to our needs and our problems? Absolutely not, absolutely not.
- The private sector is looking for a good deal. That's what they do. You can't yell at them for that. You can't blame them for that. They're looking for a good deal. So they're looking to make money, and they can make money two ways. The normal way by collecting more revenues than they spend and by taking advantage of the internal revenue code. And these public-private partnerships that you're hearing a lot about accomplish both of those goals. There are great tax advantages to people investing in the public-private

partnership for infrastructure and they also can make money under certain conditions.

- So as you know Mayor Dailey has privatized the Chicago skyway and Governor Daniels has privatized part of the Indiana highway system. And as some of you may know we have put out bids to privatize the operation to lease the Pennsylvania Turnpike. The Pennsylvania Turnpike is the mother of all toll roads. It is the crème de la crème. It's the grand prize. It's run by an authority which has no civil service. So it is the haven for both parties, not just one but both. They've had a traditional agreement.
- There are two Democrats, two Republicans, and then the Secretary of Transportation, but notwithstanding that the Secretary of Transportation is appointed by a governor of one party. They still split the patronage 50/50, and the patronage's job. Every single job is non-civil service, and of course white collar patronage as well which is the mother of campaign contributions except for you lucky investment bankers. I don't know if any of you are in the room, but you can't give anymore. So it's a very difficult thing to...

first, number one the authority is poorly run. I put it in and the executive director's done a good job improving the effectiveness and the cost saving capabilities of the turnpike. But still were it managed privately you could reduce cost dramatically.

- So there are a number of bidders now. Since the economy has gone sour we don't know at what levels these bidders will come in. There were some real juicy numbers tossed around in the old days. It's now the new days and the bids are due in about a week. When we get the winning bid, we're going to take it to the legislature and the legislature will have to approve and query whether they will. But it's a good way to get a significant new funding for transportation for us without giving away an asset. We still maintain control. They can only raise tolls pursuant to a schedule that we agree upon before the lease is entered into. They must keep up a certain maintenance schedule.
- Well I tell my citizens who are always scared by phrases. They're giving away Pennsylvania assets to foreign

countries. I say yeah the main bidder here is probably, the main outside bidder is going to be an Australian company and we really have to worry about those Australian terrorists. And I said you may wake up one day and as you pass through the toll booth you may have a kangaroo take your toll. But short of that I don't think there's any problem with it. And secondly I say it's the difference between leasing and selling a house or renting a house. If you sell your house and the new owner wants to paint it chartreuse and it's your beloved house, you can't do a bloody thing about it. But if you're renting it and they want to paint it chartreuse you can stop them, and that's what we're going to do.

We're not selling the asset. We're leasing it. Now there's a long term lease. We haven't bargained yet but somewhere between 50 and 99 years, but it's still. We maintain the basic things that are important to control that. But having said that 3 Ps (Public-private partnership), as they're called, are not popular. You have to face all sorts of political opposition to them, but I think there's a place for them. What I'd really like to see, 3 Ps

(Public-private partnership), and again we're going now, is for things that are right now difficult to build.

- So for example, I'll give you two examples. There are two things that I would love to complete, actually three that I would love to complete, but one is off the board. I would love to build the first high speed rail from Philadelphia to Pittsburg, the first real high speed passenger rail in the country, one because I think it would do a lot for the state. Two, because once we did that everybody would have to build the other pieces. The Atlanta corridor would have to build so they could take advantage of going to the Midwest.
- You'd have to build so you can get to Philadelphia quickly and then Cleveland and Detroit would have to build and then California seeing how good this is would have to build on the Pacific coast and we'd have a real national rail freight system. I mean we're a passenger rail system. I'd like to improve our rail freight lines. You all see that commercial about the gallon of gas and how much tonnage can be moved on rail freight for one gallon of gas? Stunning,

stunning. So there are things that we need to do and need to do fast.

- So let's come back to this. What I would like to see in there, two projects. One is something called the Mon-Fayette Expressway, and that's the Mon-Valley and Fayette County all the way up to Pittsburgh. It's taking the southwest part of Pennsylvania almost to the West Virginia border and giving it a major beltway that goes into Pittsburgh. There is none right now. If you want to go from those counties into Pittsburgh, it's a horrible trip, some expressway, some light.
- Some parts of the Mon-Fayette have been constructed, about three out of six legs. The other three legs are just too expensive. They're too expensive. It's going to be a toll road when it's done but it's just too expensive to complete. In the east we want to build something called the Spookhill Valley Metro, which is high speed mass transit connecting Reading and the western suburbs into Philadelphia. If you've ever ridden the Spookhill Expressway you know how desperately Philadelphia needs, the

Philadelphia region needs this. Both of them cannot be built now because they would require huge federal earmarks, and the day of huge federal earmarks is basically over. For better or worse, it's basically over.

- What I would like to do, and we're going to put out bids soon is for reverse 3 Ps (Public-private partnership). We want the private sector to put up the money to build these and then tell us how much we would have to pay them in subsidy each year. They'll put up the money up front which we clearly don't have. They'll take the revenues, and by the way I believe Spookhill Valley Metro will be hugely successful. They'll take the revenues and then they'll say to us we'll do this but you're going to have to subsidize it to the cost of \$42 million a year or \$64 million a year. And then we'll have to make a judgment of whether we can afford that.
- We clearly can't afford the up front cost. But could we afford that yearly stipend over a period of years? Maybe so. So I think there's real hope for using private sector dollars that way. Now of course in Washington, Senator Dodd and

Senator Hagle, two of the brightest people we have in D.C. are talking about the infrastructure bank. And the best part about the infrastructure bank is if we're going to do something with infrastructure we have to repair credibility of infrastructure work in the minds of the American people.

- Interestingly, when I headed up Rebuild America, we tried to show the Congress that there was real support for infrastructure. We hired a pollster and we hired Newt Gingrich's pollster because we didn't want to be accused of cooking the books and getting some liberal pollster, a young man by the name of Frank Luntz. I don't know if any of you have seen him on TV. Frank was very active in politics then. He's still active in politics, but he doesn't work for candidates. Frank did a poll and some of the poll was extremely humorous.
- He threw in questions like which would you rather drink out of, your local river or your own toilet bowl. Thirty one percent of Americans chose their own toilet bowl over the local river. But the big questions were would you be willing to pay one percent more in federal income tax for...

and then a different array of infrastructure questions: improve roads, safer bridges, etc. Every question except one got well over a 50 percent yes and mostly in the high 60s and low 70s. Republicans, Democrats alike were willing to pay one percent more on federal taxes for better infrastructure.

- Anybody want to hazard a guess to what piece of infrastructure got less than 50 percent? Just blew me away until I thought it through. Airports. Now God knows we need to improve our airports desperately. But the answer is 50 percent of Americans either don't fly at all or if they fly it's once every 18 months. So they don't care about airports. They do care about bridges, roads and the quality of their water, but other than that it was everything in the high 60s and the low 70s. It was stunning.
- Now that willingness to spend federal dollars, we haven't polled recently but my guess is that it has been eroded by all of these earmarks. It has been seriously eroded. And if you can't convince the American people that massive spending on

infrastructure makes sense if they all think it's going to be wasted. I know that there are Bostonians and Massachusians who still say the Big Dig is a good idea, but the average American doesn't. If they think it's going to go for Big Digs or they think it's going to go for bridges to nowhere they're not going to support it. They're simply not going to support it.

- Don Hagle takes a much more modest view and that is they're going to attract capital from the private sector, match it with about \$60 billion of government funds, put that money together in a pool and have a board of experts. The bank board of directors would be experts, not politicians, decide based on merit, cost benefit analysis. Which infrastructure projects in this country would be funded. I think it's a good idea. I think we need a mechanism other than Congress to dispense infrastructure funds. And I think we need a mechanism to do regional projects.
- For example we desperately need a high speed train from Scranton and the Pocono's through New Jersey and to New York City, no question about it. Actually we wouldn't need to go to

New York City, just to the two, and that's because more and more New Yorkers are living in the Pocono's now. The two Pocono counties on the New York state border are our fastest growing counties. And they drive literally two hours back and two hours from to get to New York City. If we had a high speed train, they could get in in an hour. It would be incredible.

- It would do wonders for the region, and obviously that's a Pennsylvania, New Jersey, New York project. So this bank is a good idea and there are tax advantages again to private investors going into this that I think it's good. I think we need to expand the reach of it. But in the end, in the end, the only way we're going to get there is with massive federal participation. I know that's hard to hear, but it's not just me telling you that. Anybody read the National Service Transportation Committees' report? I actually read the entire report.
- You only in retrospect have to read chapter four. But I read the entire report. The National Service Transportation Committee recommended for transportation infrastructure

only that we needed to spend \$225 billion a year. We're spending \$83 billion a year now. So we basically have to increase our spending by 60 percent more than what we're spending now, an incredible challenge for America, and incredible challenge for America to be able to do that. But if we don't do that, their prediction is the same as mine. The cost is only going to get greater and greater and greater. We ought to do a down.

Now how's the federal government going to come up with money like that for transportation let alone older sewer or dams? You know the federal government's supposed to support the safety of dams in America. It hasn't done it in decades. How are we going to come up with the money to do that? I think there are two ways and I think the money should be funneled through some form of infrastructure bank, through some nonpartisan agency. The first is a federal capital budget. They've been talking about a federal capital budget in Washington for 25, 30 years. It never gets anywhere.

- President Clinton empanelled a commission on the federal capital budget, chaired by John Corzine, then the chairman of Goldman Sachs and Kathleen Brown, then the treasurer of the state of California. I testified as the chairman of Rebuild America in favor of a federal capital budget. They took a year's worth of testimony. OMB was against it of course. Treasury was against it of course. And they concluded the commission by making no recommendation. And President Clinton who actually talked about infrastructure in the 1992 campaign, if you go back you'll see a lot of discussion in his campaign about infrastructure.
- President Clinton was so dedicated to reducing the deficit that he didn't want to think about any massive spending program. So we lost a real good chance there. Federal capital budget gets talked about and OMB is always against it. Treasurer is always against it. It doesn't get any traction. Well the worm is churning a little bit. Speaker Pelosi just came out in the last month and endorsed a federal capital budget. I want you to think about it. The federal government is the only political subdivision in this country that does not have a capital budget.

- Think about it. The federal government buys paper clips the same way it repairs roads. It buys paper clips that have a 30 day half life the same way it fixes roads to have a 30 year life. You wouldn't do that in any business. No state or local government would do that. It's time for the federal government to have a capital budget, \$1.6 trillion is the American Society of Civil Engineers. I'm terrible at this. I always need my budget director. The yearly debt service on \$1.6 trillion would be about \$130 billion. Am I right, \$140? Somebody must know the answer to that. Am I right? That is roughly, ladies and gentlemen, what we are spending, or at least what they tell us we're spending on the war in Irag and Afghanistan.
- So I don't want to hear that we can't afford it. We're always told we can't afford that. But when it comes to something that Washington wants to do we can afford anything we set our mind to. We can afford the war in Iraq. We can afford tax cuts for billionaires. We can afford this and that. We can afford anything we want. We can afford it. It's time. If we don't do it now, it's not going to be \$1.6

trillion. It's going to be \$2.4 trillion. The time to do it is now, and if I were your professor and I said to you what other benefits would come from spending \$1.6 trillion in the next 2 years fixing up our nation's infrastructure. Raise your hands students.

What other benefits would come from this? Jobs. If the metric that we're given and I've got those who did the metric. That's 42,000 jobs for every \$1 billion of infrastructure spending. Think about that. And the good thing is it wouldn't be just jobs for the current building trades guys. We need so many people to do this work that we'd have to be going into the inner city and training kids. That's what we have to do it. And all of a sudden a kid in a New York or Washington or Philadelphia high school who's consigned because we screwed up their education from pre-kindergarten on who's consigned to making no money or dealing drugs, all of a sudden we can tell that kid you can make \$60, \$70,000 a year if you've got a strong back and you want to work hard again because a lot of the jobs are laborer's jobs, or they can get into apprentice programs or we'd train them quickly.

- There are many things that we can do. It's jobs, but it's more than just jobs. It's money for American businesses. Who do you think produces the supplies to repair bridges or to fix bridges or to lay new rail lines or to build new rail? We really shouldn't stop at \$1.6 trillion. We should throw out another half a trillion in there and do the things we need to do, freight rail, passenger rail, fix up our airports. This is our chance. We can't blow it, and we're about to blow it. We're about to blow it.
- Next spring we will be faced with the authorization or reauthorization of SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) if I were president, a job that I have absolutely no interest in. But if I were president, I would ask the Congress to delay the reauthorization of SAFETEA-LU as we tried to work out a program for massive infrastructure funding. If we reauthorize SAFETEA-LU and even give it a little bit of bump and they're not only not talking about a little bit of bump in Washington, they're talking about a fairly significant cut because you know that the situation with

the press fund. If we reauthorized SAFETEA-LU and don't do anything different, spectacular, dynamic changing, we're paying \$2.8 trillion in 10 years. This is our time, and we have to do something about it. And we have to look to creative thinking.

- Senator Clinton, and some of you may know I'm for Senator Clinton, but Senator Clinton came up with a great idea. I don't think it will work, because the American people have such a bad taste in their mouth about infrastructure spending. But if this was ten years it probably could have worked and it might work again if we promise to not let Congress appropriate the money. But she said let's sell infrastructure bonds, sell infrastructure bonds. None of you remember World War II and I don't either, but I remember hearing stories.
- In World War II after Pearl Harbor we had no military infrastructure. We had no ships. We didn't have enough tanks. We didn't have enough ammunition. And we didn't have enough money to build it all. So what did we do? We essentially sold war bonds. See this pin? This pin has a

long story, but I'll try to make it as short as I can. After 9/11 I was running for governor. A supporter from Erie sent me this and said it's a little different than the ordinary flag pin that most politicians where. Stick it in your lapel. It looked nice. I stuck it in my lapel.

After a couple of months, I called him and I said, "What is this?" He said it's a symbol of the Armenian resistance. They wanted something that looked like the American flag but not quite the American flag. So I said okay that's fine, and they were fighting for freedom. So about two months later I called him back. I said, "By the way," I said, "how did the Armenian resistance do?" He said they got crushed. I said, "Is that a good symbol for the campaign then, they got crushed?" But I later learned that a pin somewhat like this, not quite like this, but somewhat like this, was given out to people who bought war bonds, and they would wear it on the street as a symbol of pride showing that they had contributed to the war effort in the country.

- Senator Clinton proposes selling infrastructure bonds. And again I'm not sure the environment's right and I'm sure we'd have to lay a lot of ground work. That might be worth an effort. It might be worth an effort. Hell, with the stock market going the way it is now, government bond doesn't look so bad, and if we could create jobs and do something for the country who knows. But we've got to think... I hate the word "out of the box," but we've got to think out of the box. We've got to have a capital budget. We've got to have an infrastructure and repair bank and we've got to get off the dime. And we've got to do it and do it now.
- So here's the pitch. I'm not asking for money, which is nice, but Building America's Future intends to be a coalition virtually of first and foremost every governmental subdivision in the United States of America. Our goal is to get all 50 states, every major and mid-sized city in America to sign up as member, every borough and municipality to sign up as members and every county government around the country to sign up as members. But we want private sector partners. We want big companies,

small companies, ordinary American citizens. We're not asking for money. We're just asking that people sign up. And the reason we want to sign up so many different agencies, people in organizations is we want to have real power.

You know Grover Norquist has enough followers that he can send out an email and get in turn 400 emails sent to the desk of every Pennsylvania legislator, every Pennsylvania legislator. Our guys... they're not formally dumb by any means. We have some very bright legislators. But our guys get scared by mail. For some reason they follow polls when they're running for election but they don't follow polls on issues. I can show them all the polls in the world on basic handgun control, one gun a month. Seventy two percent of the people of Pennsylvania support it. Forty four percent of NRA members in Pennsylvania support it, and yet I can't get more than forty percent of the legislature to vote for it because they get those four hundred letters and faxes and emails.

- Well I want us to be organized so we can get thousands of letters and emails into every congressman's office and every senator's office. It's time, and again the problem is this isn't sexy. It only became sexy after Minneapolis. It only became sexy in Pittsburgh when the Birmingham bridge dropped nine inches. We can't wait. Every time you're sitting in traffic, think about it. Think about it. Every time you get on a supposed mass transit and it doesn't work because the service has been cut over and over again to make ends meet think about it.
- Every time you're riding on the highway or the turnpike and some huge truck goes by you and you're scared to death think about rail freight. I mean there are so many things we should be doing as a country and literally the time is running out. And that's why I decided to try to reform Rebuild America and we call it Building America's Future. I wanted people who had done something on infrastructure or had taken a stand, but I wanted people with star power. I'm like the file clerk of our organization with Governor Schwarzenegger and Mayor Bloomberg.

- In fact it's almost like (the movie) Twins again now. Where they go people listen, and the good thing is both of them are dedicated to this as post-governing, something they want to do. Once they leave, they want to do it as governor and as mayor, but once they leave their positions as governor and mayor because both of them are going to be gone in a few short years as I will be. And this is something that's for the long run. This is a real battle. It starts with SAFETEA-LU but it continues over and over and over again. I think when you look at shared prosperity it goes to what type of nation that we want to have. And if we want to have a nation that stagnates, that sort of rides out the wave of the American century and then becomes sort of a 1A economic power in this world, then we should keep doing what we're doing.
- If we want to have a nation that has the brightest future for our children and our grandchildren, it's time to act, in so many different ways. It's time to act educationally. It's time to act in terms of energy. But it's certainly time to act in infrastructure. We cannot have a vibrant nation, economically, quality of life, global warming. I mean I

haven't even touched on the benefits of infrastructure spending and mass transit spending, rail freight spending, the benefits that it has on the global warming situation. We can't do any of those things unless we fight hard to make infrastructure and to rebuild a new infrastructure for this country, and we need all the allies we can get.

- So I want you to do something tonight. Is anybody here for the Building America's Future staff, because I'm going to get this wrong? We have a website and I don't think it's Building America's Future, but try Building America's Future. And if you find our website and I hope you will, I think you'll find it. If you find our website, sign up, become a member. It doesn't cost anything. Become a member. Get on our list. Become part of the coalition. We need you, and most importantly the country needs you. Thank you.
- MS: We have time for two questions. Say your name and then your question.
- Q: Chow Chin, freelance correspondent. Governor, you are so excited in talking about the infrastructure. If Hillary Clinton gets the democratic nomination, are you going to be

a vice president? No, let me finish. So you can be vice president for infrastructure.

Well interesting, I mean not an interesting question. A: Ι can't because I'm going to serve out my term as governor. That goes till January of 2011. There are a lot of local reasons I couldn't leave, and there are a lot of things I want to do in Pennsylvania. But the real job, the real job, the two most important jobs... of course traditionally everyone talks about state and defense and the attorney general. But I think the two jobs that will signify, actually the three that will signify how serious the next American president is over change is secretary of energy, secretary of transportation and secretary of education. You better put three... I'm trying to think of a way to say this without using slang ... that you put three hustlers in there... there's got to be a word ... three dynamos, there you go, three dynamos in there, not just ordinary... I mean look, Secretary Riley was a great Secretary of Education but you need a Secretary of Education that gets out there and lobbies like hell for the federal government to fully fund special education, lobbies like hell to have universal pre-K, you know, things like that, and you need that in your

Secretary of Energy. Those are the jobs that I actually would probably be more interested than vice president. The last time I looked vice presidents go to funerals and I'm not big on that. But let me also say that the good news is Senator Clinton and Senator Obama both talk about infrastructure a lot. Senator McCain has got to get over his, and he is right about the earmarks. He's the best earmark policeman and he has railed against wasteful earmarks for a long time. But he has to understand that earmarking projects if it's earmarked by professionals is good not bad. Earmarking if it's done just to get people reelected obviously bad. We've got to get him over the hump. And one of the things that Building America's Future wants to do is to create a forum on infrastructure for the two presidential candidates, not a debate, but a forum where they each come in and spend an hour talking to infrastructure experts about infrastructure and the role it will play in the next administration.

Q: Thomas James. Albright issued a call last fall for a national infrastructure bank. Are you familiar with it because he wants to spend about \$290 billion a year getting us back to what we spent? It's about three percent of GNP.

Do you think that's affordable where we were in 1980 before the great inversion? Comments on that?

- A: Yeah, I mean I think \$290 (billion) is, if you assume that the National Service Transportation Commission is correct that \$225 (billion) for transportation infrastructure. If you put in water and sewer and other things, \$290 (billion) is about the right amount. How does he fund it though?
- Q: Raise the money by bonds. It would be definite finance. So it sounds like...
- A: Either a capital budget or ...
- Q: Yeah, I'm sure he's in favor of that.
- A: Or one of these. Well I knew that Rotan had done this but I didn't know that Galbraith had done it.
- Q: (Inaud.).
- A: Seriously. Will you do that?
- Q: Yes.
- A: Thank you. One last one.
- Q: Your steel workers met with Carl Pope of the Sierra Club at their convention just recently. The steel workers met with Carl Pope of the Sierra Club. They're all talking about green collar jobs. What are you hearing from the unions? What are the unions... what's the labor... I'm Jacqueline

Frawley. I work with the Labor Heritage Foundation, and I'm deeply committed to the labor movement's connection to this project.

- A: Well I think labor movement understands the great potential for green collar jobs. First of all a lot of the green technology requires old time manufacturing. The steel workers, I was able to get the steel workers to represent Gamesa (Gamesa Eolica) the second largest wind energy company in the world who put 600 construction jobs, old fashion construction, manufacturing jobs, excuse me, building those huge blades that have to be built, and it's basically jobs for steel workers.
- So there are those types of jobs. But there are also jobs in solar panels, in assembling solar panels. There are jobs in so many different, geothermal. There are jobs in so many different aspects of alternative renewable energy. We have a lot of... we have a company called Voight Siemens that employs several thousands Pennsylvanians that does hydroelectric, not in this country but in Canada. They make hydroelectric equipment. Westinghouse is in Allegheny County. Westinghouse just signed a contract with China to

build eight new nuclear reactors for tens of billions of dollars. So there are all sorts of jobs.

- One of the things that Senator Clinton points out is that there are green jobs in energy efficiency. Think about that, installation of the right type of windows. In school buildings, installation of the right type of materials in the roof can cut your air conditioning costs and cut your heating costs. There are so many sort of esco (ph.) type jobs that we can train people for that don't even need, certainly don't need a college degree and may not even need a high school degree to do. So there are all sorts of jobs...
- A: That help us (inaud.).
- Q: Absolutely. There are all sorts of jobs in the green industry from engineering jobs. I mean gosh you know the old song, Raise Your Kids to Be Cowboys. Raise your kids to be engineers. There's not an engineer in America today that isn't highly sought after. But there are great jobs for engineers and Ph.D.s but there are also going to be jobs in that economy for folks who haven't had the benefit of higher education and who can be trained. So look this

is if you combine the green collar job potential with the infrastructure job potential we could get an awful lot of Americans working at family sustaining wages. Not such a bad idea folks.

- MS: My name is John Irons and I'm the research and policy director here at EPI as well as the director for the Agenda for Shared Prosperity. The Agenda for Shared Prosperity's essential aim is to articulate policy options that will spur economic growth, reduce economic insecurity and provide broadly shared prosperity. Public investments in our nation's infrastructure literally laid the foundation for long term economic growth and we've seen catastrophic failures to invest in the breach of levies in New Orleans, the collapse of the bridge in Minneapolis as well as black outs that have struck major cities in recent years. With our economy slowing, infrastructure investment can also boost the economy by creating jobs in the short run.
- Now I'm going to introduce two of our panelists later, but in an interest of time I want to get to Congressman Earl Blumenauer who's with us today as well. He has been an outspoken supporter of the infrastructure investments,

including investments in roads and bridges and in water and sewer systems as well as other areas. He's emphasized that maintaining these public structures are essential for economic growth, economic competitiveness and shared prosperity.

- As a member of the Ways and Means Committee, he has worked to generate support for a new national plan of action on infrastructure spending. You should have additional details of his vision and some of the details of his plan in a packet that was handed out earlier. So I'm going to introduce our other two panelists later, but since the congressman has to get back to the Hill I believe to do something minor like presiding over the House of Representatives we'll let him go first and hopefully leave enough time for questions afterwards. Thanks.
- EB: Thanks John. It was fun for me to spend a few minutes listening to the governor and his vision. The role that I'm working on in Congress is to try and give dimension to what he's talking about, although I'm sorry we didn't have time for the fourth question, because as an Obama guy I was going to ask him what he thought of Hilary Clinton's idea

to support John McCain and the gas tax holiday. I hope he will talk to her about that to remind her of what her position was when her opponent when she first ran for the Senate brought that up and she indicated that that was a bad idea that we needed the money and that there was no evidence that would do anything to put money in the hands of consumers but that actually would increase profits of oil companies. But I missed that. I'll catch him the next time that we're out and about. But it's I think illustrative that we have one and a half of the major candidates for president who are talking about something that is so goofy.

It gives me a sense of the challenge that we all face to do what the governor was taking about to let people understand the nature of the infrastructure crisis and if anything I think the governor understated that. It wasn't our Polaris missiles, our atomic cannons, our forces in NATO that caused the former Soviet Union to collapse and the Berlin wall to come down. It was the fact that they couldn't keep pace with us economically during that golden era of infrastructure and it was after all the national defense

highway system that we built that aided our productivity and that brought about a challenge economically that the Soviet Union could not maintain. And I will tell you I am much more concerned today about our losing the infrastructure challenge to China than I am with an new weapons system that they may develop thirty years from now that might compete with us militarily.

- We're getting our clock cleaned and the governor is absolutely right in his reservation of the facts. As near as I can tell we're investing less today than at any time previously in our history. And what is frustrating is that it turns our back on a grand tradition of broad vision of infrastructure in this country. Two hundred years ago, 1808, then President Jefferson commissioned his secretary of the treasury, Albert Galeton, to develop a plan to nit a ragtag group of 13 colonies into a transcontinental nation.
- President Jefferson recently having risen above principal to complete the Louisiana Purchase, something that he wouldn't have supported if it had been proposed by Hamilton say, but it was an opportunity which he was wise enough to seize.

And the vision that he developed, Galeton and Jefferson, had for example the partnerships, the public/private partnership implemented by the state of New York that was the Erie Canal, the 1862 legislation, the transcontinental railroad. They had a mechanism whereby they were able to use land the federal government controlled to convert that into value for educational infrastructure. It served our country well for most of the 1800s.

- In 1908, Teddy Roosevelt, in actually May, it's coming up just in two weeks time, the anniversary of his convening for the first time the nations then forty six governors, his cabinet, the Supreme Court, all sorts of certified smart people, business leaders to come together to talk about what the infrastructure needs were for his century. Out of that was a fascinating look at the degradation that had occurred in some areas of waterways and hillsides and deforestation. It's interesting if you go back and read the proceedings.
- Andrew Carnegie, after talking about the future of coal and manufacturing, has a great little rift about solar power

being the ultimate energy source and that he's confident that we'll be smart enough and invest in research so we can capitalize on it. A hundred years later that would be a good idea. The plan that came out of that effort included things like the national park service, the massive hydro projects, the waterways. And it also helped germinate the vision for the interstate highway system actually that took form in the basement of his cousin Franklin's White House where his uncle Franklin Delano came up with the national plan that was ultimately signed into law with the interstate highway system by President Eisenhower. 1808, 1908, you can see where we're going with this.

It's time for an infrastructure plan for our century, not just to go back and revisit areas of infrastructure that the governor referenced, but we obviously need to do that with rail, with roads. Much of the water infrastructure would be recognized by Teddy Roosevelt. We have 72,000 miles of sewer pipe and water main that's over eighty years of age and some of it in the more mature cities are brick and wood. But there are things that Teddy Roosevelt wouldn't recognize, in terms of our aviation system, the power grid, massive pipelines. We should throw in broadband into this.

A comprehensive look of the infrastructure needs for this century. It's time for a new vision that speaks to our needs today.

- I do appreciate what the governor was saying about the partnership with the federal government. I want for us to reexamine that. It is time for us to have a uniformed approach I would be prepared to argue that doesn't get stuck in the silos. And I love his reference to high speed passenger rail. One third of the air travel in this country for passenger service is less than 350 miles. It doesn't make sense now. It certainly doesn't make sense given the delights of airline security. And it doesn't work with \$120 for a barrel of oil.
- You can't economically fly 19 minutes from Washington to Philadelphia. It's goofy. And what we need to do is work to recalibrate what that partnership is and get out of those silos. Part of it is a problem with the federal government. Part of it is the special interests that are out there that don't trust one another let alone us. But the most effective, cheap and quickest way to provide more

air capacity is by upgrading these passenger rail links. It's also the quickest way to be able to provide relief on congested highways and to revitalize central cities.

- We need to take each of these in a comprehensive way. It is more money and I am doing work now. I'll be introducing some legislation next month to deal with a water trust fund. In the Carter administration, we were producing 78 percent federal investment. Last year it was three. We need more money in it. I must say that I'm a little skeptical about lots of mechanisms for borrowing more. We're very good at borrowing. We don't want to heavily mortgage the future. We need to put more money into the system to service the long term capital needs. Part of what we need to do is to extract more value from the federal partnership.
- Right now there are people cranking away in the Department of Transportation on transit cost effective formulas that have absolutely no, zero, relationship to how any transit agency in the country manages its operation. But it's a convenient mechanism to say now. It's a convenient

mechanism to stretch it out. It's somebody's job to tweak the formulas. We need to redefine what the federal government brings to the party and what state and local governments and private partners need to do to justify the federal partnership.

- We don't need as much oversight and hoops and procedures frankly that no longer are relevant if they ever were. We need to extract more value. And at a time when construction costs have been, what, 40 percent in the last three years, squeezing a year out of the process of a major process is just like giving a 12 percent grant. And at the end of the day part of the resistance of the American public to things like increasing the gas tax, which we haven't done since 1993, part of it is sort of a skepticism about value.
- They need to be convinced that there's... that's why politicians come up with goofy ideas like the gas tax holiday when the trust fund is going into deficit for the first time in its history. But the same person who will be cranky at the pump about paying a penny or two extra in gas for a gallon will go inside to that mini mart and they'll buy a bottle

of water. What's the cost on a per gallon basis? We did some computations. We found \$26.70 at a theatre two blocks from my office. I don't even want to know what I would pay in an airport in Chicago for something that you could get out of the tap virtually for free and have a higher degree of confidence in the quality of what you're drinking. But there's no outrage over that because the American consumer is convinced of the value.

So that's part of our challenge that we all face is making sure that they know that they are getting value for whatever it is that they're called upon to invest. Part of this is recasting so that people understand the national security implications. It was the national defense highway system. All those overpasses were engineered so the atomic cannons could go underneath them. Making our infrastructure appropriate for the challenges of this century is as a profound a national security objective as any. And it's not just about making it strong economically so that we are not vulnerable.

Katrina illustrated the dangers that communities face from natural disaster if you don't have any way out of town when disaster strikes and all of the highways are clogged. Think of the pictures in the paper a few days after Katrina of Hurricane Rita where about to hit Houston and people were all trying to get out of town on the same freeways running out of gas, pushing the SUVs. It was not a pretty picture. There are some of us in this room that were in Washington, D.C., on September 11, 2001. And were it not for Metro there were some tough times and it would have been an extraordinarily chaotic situation, and if that other plane had hit here it would have really been ugly; or the next day, September 12, 2001, if it weren't for Amtrak there would have been a traffic jam from Arlington to New Haven. And whether you believe the science about global warming, rising sea levels, extreme weather events, or you just think it's one of those little cycles that we're in that will work its way out in 20 or 50 years, there is no community that I've done any work in that has infrastructure that's appropriately sized for the challenges of those extreme weather events and rising sea levels, not one.

- This is national security in its most extreme form. It is about a new economy as well. There are millions of jobs to be created to be able to deal with the infrastructure repair, extraordinarily labor intensive jobs. Fixing it first creates far more jobs even than new construction, which people are excited about, and the type of investment is such that it pays dividends for years to come. Money invested in green buildings, the LEED certified platinum with a twist, that extra investment of a percent or two pays for itself often within a year or two and keeps paying dividends for years to come.
- I live in a community, Portland, Oregon, that had the first comprehensive energy policy in the country back in '79 that prides itself in giving people transportation choices so that you don't have to burn a gallon of gas to buy a gallon of milk from everything from bicycles to streetcars, light rail, to the radical notion of mixed use development so people can live near where they work and want to recreate. In our community that translates giving people more choices about where to live, work and how to move means that we drive more than 20 percent less than the national average.

- It's not just that we're not stuck in traffic and maybe a little bit more pleasant to be around occasionally when it rains all the time, but it translates into \$2500 per family per year that isn't spent on transportation that can be spent on education or housing or entertainment. And because of the nature of that investment, because we are addicted to foreign oil and the large number of vehicles that we buy that are manufactured overseas, 83 percent of the dollar of transportation and fuel leaves the typical community. We save \$800 million a year that is re-circulated in our local economy.
- It's not just money in their pockets. We can do the same thing nationally. I'm prepared to argue that there are three things that we ought to do. I applaud the governor and their Build America's Future coalition. I think everybody ought to try and find that allusive web page wherever it is and sign up. I think we ought to broaden that coalition. We ought to make sure that it's not just every state and local municipality. We ought to have every major professional group, every major business organization. We ought to have in that coalition the Sierra Club and the

Garden Club, the truckers and the bicyclists to build a coalition that will have the credibility and the import so that politicians will face up to what needs to be done and not propose goofy things.

- Second, I think that that coalition ought to be about sponsoring at least one infrastructure forum in every congressional district in the country between now and the election. Bring together that coalition. Bring together the Congresspeople and the candidates for Congress and other community leaders and hear what that federal partnership should be. Talk about the infrastructure investment, what's happening and what they want to happen. Broadcast it on local cable. Get the media involved. People eat this up. We need to engage people at a higher level and make this a national conversation. And yes, we ought to find out what the national candidates have to say.
- I think we ought to bump that up to a higher level of intensity. I think we ought to have a national infrastructure summit in the Fall say about October 6. Bring the two major candidates for president there to indicate what they think

about the infrastructure crisis, about the highway trust fund deficit, about what they're going to do with finance and programs. While we're at it, I think we ought to invite the leadership of the House and the Senate in both parties to come forward and share their vision and their ideas. A week ago I was with Speaker Pelosi.

We had an appearance in New York City where the topic was rebuilding and renewing America. The speaker is totally committed to this program. She's committed to a national vision and a plan. She's tried to put infrastructure in the economic stimulus package. She understands the connection between rebuilding and renewing America and saving the planet, green jobs and innovation. I would love to have a platform for her and for her colleagues in congressional leadership to be smoked out on this issue, to give it the spotlight and the attention that it deserves. There is no more important conversation that any of us can have today, and I say that with respect to people who care about global health, about global warming, about HIV AIDS, about the war in Iraq.

- This is a subject that actually touches all of those items, and it is one that has the potential not just to help heal the planet, but to bring people together. We have a "bike partisan" organization on Capital Hill. Part of it's tongue and cheek, the Congressional bicycle caucus, because I came at a time when people were not being very nice to each other unlike today. But we found that by organizing around cycling issues it was a chance to sort of take the temperature down a little bit.
- We found that almost everybody had a bike story. We did a few social things, some rides and whatnot. But we also were able to have a safe and thoughtful conversation about infrastructure for biking and pedestrian activity. You know we wouldn't be worried about morbidly obese 400 pound sixth graders if more of these kids could actually bike or walk safely to school on the most efficient form of urban transportation ever designed. And what we found was that this was something that people could kind of get behind and helped to produce four and a half billion dollar in the last reauthorization for cycling and pedestrian facilities, a safe route to school program in every state in the union.

- We can do the same thing with the dialogue about renewing and rebuilding America because we're going to find out that more Americans agree than disagree. We're going to find controversial issues have resolution if people are working cooperatively towards a common vision. I deeply appreciate your focusing on this today. I look forward to working over the course of this year to make this a critical subject of the political dialogue. And then when we hit the sweet spot in 266 days, when we turn a page here in Washington and start a new chapter with a new administration and hopefully a stronger Congress, we'll have an opportunity to tackle these challenges in a way that America deserves and America needs. Thank you very much.
- MS: Two quick questions if we have time.
- Q: Congressman, I'm Ross Eisenbrey, Vice President of EPI, and your vision is terrific. The Democrats in Congress, however, seem to be deficit obsessed and it's hard, and running from the taxes, I mean you said what we need is not borrowing but revenues now. Those revenues come from taxes. What do you see as the likelihood that even in 2009

that the Democrats in Congress, not to say anything about Republicans, will be ready for that challenge?

- A: Well part of that will be determined by where the public is. But I don't think that we should pile debt mindlessly mortgaging the future. I think there are very specific things that we can do consistent with PAYGO rules. First of all, all three presidential candidates agree that we're going into a carbon constraining future and support some version of cap and trade or carbon tax or something of that nature. I have great fun serving on the global warming committee, ways and means and budget, where all this stuff kind of converges.
- Our estimates are that between 50 and \$200 billion a year are going to be created by any of these schemes. A great deal of value that's going to be captured and transferred having a small amount of that to deal with rebuilding and renewing America can help be transformational. I think there is an opportunity to deal with adjustments of things like fuel taxes if people know where it's going. A capital budget and changing the budget rules makes all sorts of sense. We have... we do not take into account in our budgeting schemes

present value. And so even things that we know will save money over time are a positive cost as opposed to some of the things we spend under the guides of emergency supplemental, which for the appropriators are free money.

- I worked for six years to reform the flood insurance program and we had a number of things in that bill that would save money. It was harder to get the appropriators to spend tens of millions of dollars to prevent things like the Katrina disaster than to spend billions of dollars after the fact cleaning it up. We can adjust those rules. As long as we have the value proposition and the vision, I think there will be political acceptance and that's our job to make the system rational, the case compelling and the vision one that people believe in.
- Q: Bob Baugh, the Industrial Union Council, the AFL-CIO. Congressman, the governor just talked about a process through the bank and having in essence a group of experts that would help review a trillion dollars worth of projects and spending and set priorities. How does this mesh with your idea of each Congressional district holding an infrastructure confab to talk about these issues and how

would you emerge with a set of in a way rational priorities, priorities that have some symmetry across regions and districts so that we do have national priorities of how we do this?

- A: Bob, it's a great question and it just drives me crazy. In the absence of a vision, in an absence of a common set of agreed upon principles then you have, it's a free for all. It's a food fight. And some of it is just, it drives me crazy. We had at the point of failure of the levy in New Orleans, there were two thirds of a billion dollars being expended by the Corps of Engineers on a locally supported project to improve navigation in an area where it didn't have any pressure to do so other than political and local economic. We need to establish as part of this national vision agreed upon set of principles and goals and objectives indicating what we are for, raising the profile and the involvement.
- If people knew how goofy some of these projects were as long as they are trans... that's self policing. That pushes back. I invite anybody to look at the earmarks that I have done in my community to try and jumpstart economic activity, to try

and blend in with the overall regional plan. I suppose we would have something like an elaborate base closing commission to deal with water infrastructure all of which is earmarked in (unint.). But I would like to start with having a national plan, a national vision, and have people locally come to the table and talk about what they need and what they want and what they expect.

- The way that some of these really goofy projects find their way into the political process is because the rest of us are asleep at the switch that we aren't putting the profile on the local priorities. If we do our job right in communities across the country, we'll have a consensus. We'll have a local... You've got to have the local plan to be able to get the most out of it anyway. I think that process is something that people all over the country are ready to do. I've been in over 200 communities having conversations like this in recent years, communities large and small.
- Citizens are hungry. There is a coming together of people in business in labor and environmental arenas. And if we gave

them a playing field that was level and where voices were heard and they could focus on these larger challenges I think we would see just like the bike caucus, I think we'd find people coming together and I think we would have a decision making process that we would have confidence in.

- JOHN IRONS: Thank you. Great, thanks. Let me introduce our final two panelists now. First we have Mary Filardo who will address the need for adequate schools which are critically important for maintaining a safe and healthy learning environment for both our kids as well as for our teachers. Mary's the executive director of the 21st Century School Fund and she has written extensively on public school facility issues. EPI and the Agenda for Shared Prosperity are pleased to release a new study today authored by Mary, which articulates the need and suggests improvements in school infrastructure. You can find a copy of the paper that's been handed out on your seats.
- Secondly, the 21st century economy is increasingly driven by information. And the internet has created new markets and new economic goods. In this context Mark Lloyd will address

the need to build our informational infrastructure especially through the expansion of broadband technologies. Mark is the vice president of strategic initiatives at the Leadership Conference on Civil Rights. He is also an affiliate professor of public policy at Georgetown University and has written extensively on broadband policy. Among his other achievements, Mark is an Emmy award winning journalist and has produced and reported for radio and television including NBC and CNN. So let me turn it over now to Mary.

MF: Thank you. Good morning. It's really interesting. I guess infrastructure is a guy thing. And I was struck by how little schools were actually mentioned as a part of our infrastructure. And I've had the experience before where people kind of think yeah, yeah we spend a little bit of money on schools. In fact we spend an enormous amount of money on school infrastructure. And what I want to do today is help folks understand how critical a part of the U.S. infrastructure school is, not only for the education but for jobs and for the immediate term as well as long term. So, Jason is my deputy director actually. He doesn't

normally do this job. But one of the things to understand is really how much public school infrastructure there is.

- Now there's a little bit of a problem because there is not a national inventory on school infrastructure. There's not even to a large extent state inventories on school infrastructure. It is such a locally controlled industry that you can probably find it at the school district level, but it's hard nationally. So what we've done is we've said okay there about 49 million public school children, K-12, pre K-12 often in the United States, and working with sort of average square footage per student you end up with about 6.6 billion square feet of space.
- So in the last, on this inventory, in the last ten years really, from '95 to 2004, what we had to do we bought a database from McGraw Hill because there is no national database but there's one public source of information on capital outlay. That's the U.S. Census of Governments. And if you total that you get \$504 billion spent in the last ten years. So these guys are throwing around numbers, \$130 billion a year on infrastructure, \$290 billion a year. We're talking 50

billion a year and that doesn't include the interest. The interest in that same period was \$85 billion that local school districts and states paid for their public school capital outlay.

- So we're really looking at \$60 billion a year just on school infrastructure. So what you see in part is the numbers that you're getting. They're way low. They're way low. What we know from our database that said that we had is about \$300 billion, was just hard costs. These are just construction. These are not architects. These are not engineers. These are not project managers. Just the hard construction costs were about \$300 billion. (CORRECTED from "\$300 billion a year") In the capital outlay expenditure, what you see is the \$360 billion was the government reported the \$300 billion is what we had project specific data on, and that \$60 billion is close to what would be your soft costs. That sort of just gives you an idea of sort of the datasets that we're working with here.
- In the way we've spent this, there's huge growth, huge enrollment growth in that period, 1995 to 2004. In fact

that enrollment growth was larger than the period from 1965 to 1995. So a lot of the new money was spent on new construction, new seats for new students coming into this system. What that's done and you'll see in the inequities that are a part of this system that it really did not address much of the deferred maintenance, much of the very poor conditions that we have in many of our school districts.

So, on the one side you've got capital, and school districts pay for it. They do borrow. Like Governor Rendell said, the feds don't borrow, but school districts borrow. Municipalities borrow. States borrow. But they have another huge area that they spend on which is their operations and maintenance. And to a large extent what they tend to do is they defer on the maintenance and repair side, but even when they're deferring the... Joe Agron who has covered this for years and collected this information through surveys of school business officers estimates this adds up to about \$824 per student per year on maintenance and repair and operations.

- So you see that a major portion of that is utilities and that's increasing as you can read in the report. But so what you've got is \$824 a student times let's do it times 50 million kids. We're looking at \$40 billion a year on maintenance and operations, right. So and that's not in the capital budget. That's not in that \$60 billion a year. That's coming out of the annual appropriations that school districts have, 50 percent from the state, roughly 10 percent from the feds, and the other share on average from their local revenues.
- This is then the student breakdown. So you've got this huge scale. You have enormous dollars going into this infrastructure to operate it, to maintain it, to build it. One of the things that we were very curious about is how are these dollars being distributed. Who is really benefiting? And in particular we were interested in that ten year period '95 to 2004, which was pretty good economic times. We wanted to know was there a trickle down where the lowest income communities were the students that were eligible for free and reduced lunch. Did they get their fair share?

- Well what we found is that in fact they did not. And remember that again in the lowest income districts you're talking about schools that are in the worst condition to start with. So poorest conditions to begin with and this is the level of investment. So let me help you guys see what's happening here. On the left hand scale is the number of public school students. So the gray bars, you can see that most of the kids attend school districts. It doesn't mean that they're all low income. It means they attend school districts with between what is it low income, 40 to 75 percent eligible for free and reduced lunch.
- In the districts that are very low income or low income the school district spent on average \$4800 to \$5100 a student. Now what this is is ten years added together divided by the average enrollment. So this is on capital outlay. This is not maintenance or repair, just capital outlay. In the highest income districts, they were spending as much as \$9300 a student. Now what we know is they were not in the worst condition. They didn't have so much to catch up, and really the schools that the poor kids were attending were

in great shape. So they didn't have to spend much. We know from the 1995/96 GAO study that in fact minority children, low income children were attending schools in by far the worst condition.

So what we know now is they didn't catch up. In fact the disparity grew. We were curious whether or not if you looked at this by race we were getting the same kind of distribution. I think this is probably good news which is that the color green in terms of families and school district actually matters more than race. There is still inequity here but it's not as great as by income. And this one is interesting because we had the zip codes where all of these individual school construction projects were and in the neighborhoods. So what you see here is that the income of the neighborhoods actually had, there was more disparity by location of schools. So what that means is schools that are located in wealthy communities were far more likely to have major capital investment than schools located in very low income census tracks.

One of the things that we were interested in also is whether or not some of the challenges to the spending of capital whether or not this was being affected by some of the court cases. So we looked at... the Educational Law Center is one of our partners in building educational success together. And what we found is that in fact it was affecting the spending. And when we did an analysis nationally where there were successful court cases the states were spending 25 percent more on infrastructure, on school infrastructure, than in states where they had not been successful cases. And in New Jersey, over that ten year period it actually, I mean you can see it was tough on the middle income districts because there was a court case governing the very low, and the high income they were going to be able to take care of themselves.

Now again for those of you who know Newark or Camden or Elizabeth or Patterson, they didn't catch up because in Flemington and other districts in the high income end they were generally in very good condition. They were able to address some of the problems of crowing and getting black box theatres and more technologies. In Newark and

Patterson they were just scrambling to keep the roofs from falling on the kids. So basically... I mean part of what we are concerned about is that school infrastructure is central to any discussion about U.S. infrastructure.

I would argue that if on your roads what you are traveling across is not manufacturing goods, not a real productive economy but people going to low wage jobs because they haven't been properly educated. We've got a problem. We actually can't afford those roads to take people to work to Wal-Mart. We can't afford those roads to take people to work to essentially to their unemployment office. So what we have to do is invest in schools in a way that brings the knowledge economy really to the forefront to say that this is a central part of our infrastructure.

Creating a pipeline of people who are properly educated to live in a global knowledge economy and participate in it is key, and we think that there's some dollars that will help us do that and we'll benefit three times. We can eliminate a backlog of deferred maintenance and repair. And what we suggest here, and we've worked with EPI on this, is \$20

billion to address the current health, safety, maintenance and repair problems that we have and particularly our school districts serving high proportions of low income children.

The second thing is we have an enormous disparity that we can see has only grown during the period between 1995 and 2004. And when we looked at what would it take to bring the lowest income districts up to the middle income districts, not the highest income districts, is \$50 billion. If you want to bring it up to the highest income, it's another \$150 billion. But we think that's a critical piece that is an appropriate role for the federal government.

The third thing is I think that as part of any infrastructure plan you have to have an ongoing commitment to work with and support local school districts that are needed to maintain their life cycle replacements, their ongoing new construction renovation in order to make sure that we have the technology, that we can support early childhood, that we can support science education because if

we don't have the engineers here to do all these billion dollars of reconstruction we're going to be importing people. Right now part of the benefit of infrastructure is you can't import it. You actually have to do it here. But if we don't have the labor power here that's properly educated, we're going to be importing the labor as well, and our people are also going to be unemployed.

So in these three areas that an ongoing investment-really targeting some of the disparities that we have, because we're not going get it if we just sat up... And I think Congressman Miller is looking to introduce a bill very soon to authorize \$6.4 billion on school infrastructure. That's a great ongoing commitment to a 10 percent share of the feds for capital like their 10 percent share on operating... Just go ahead, Jason. And, again, in the discussion about green, in the discussion about education, part of what we can do...

This is actually a private school but this is in Washington, D.C. This is what their roof looks like. Right? And some of the kinds of jobs, some of the benefits

that we can get from investing in our infrastructure both on a maintenance repair... Because you can repair a roof. You can replace an existing roof. You don't have to... This is actually on an existing building. You can invest in this kind of technology at the same time. So you're getting the jobs that you need here, you're getting the investment in your knowledge economy and you're getting a long-term infrastructure that will really improve the quality of public education for all children.

And I think that-that it's-what I really wanted to say to Governor Rendell and I wanted to say to Congressman Blumenauer is, you know, you've got to include schools in your conversation. And I think that, you know, people will not buy it if it's just roads and sewers. I think that we... Actually, the school people can help this infrastructure conversation. It is such a big part of the infrastructure of the United States. But I know that it's a little off the radar but I think that we can get it there and hopefully you all will be right there with us. Thank you. [APPLAUSE]

UNIDENTIFIED MALE/FEMALE SPEAKERS

- JOHN IRONS: All right. Thanks. I think we have Mark up next. I think while we're trying to switch the technology over here, would you like to take a couple questions now and then we can... My suggestion is we can take a couple brief questions now, have Mark talk about broadband and then come back and talk about infrastructure more broadly.
- FS: (Unint.) okay? Yeah.

[NOT MIKED]

- MS: Hi. (Inaud.) Strategies. Arlington is moving (inaud.) the other communities. It actually still has its own (inaud.) issues though (inaud.) as well. I was waiting to see at the end (inaud.) but I just was wondering how explicit is the whole idea of (inaud.). When you talk about rebuilding, school construction (inaud.)... [COUGHING] ...how much is that? It seems that it should almost be that when we talk about retrofitting and we talk about building schools, they should all be now green. Everything should be green...
- FS: Well, they're ...
- MS: ...if possible.
- FS: I think that's right and I think that, you know, you've got New York City passed an ordinance that any building that's newly constructed has to meet silver, you know, LEED certification. And in Washington, D.C., there's a Green Buildings Bill that also requires at least that it be LEED

certified. I think that when you talk to school facility people, they will say, you know, of course you know, we try to do that because they're worried about those operating costs, they're worried about their utilities, etc.

It gets tough. Schools are very tight on their pockets, as you know if you're working with any particular district. And the first cost is a problem, you know. So it's-again, one of the ways, you know, that-part of a federal role doesn't have to be just, okay, here's the money for the project; it could be to compensate for the differential between higher first costs associated with, you know, a cheaper H-VAC system or mechanical system and one that's going be more energy efficient. So there are a lot of things that can be done and so I think... Let's get... Are you ready? Yeah.

MS: Almost.

FS: Almost. Okay.

MS: Can you do one more quick question?

- FS: Yeah.
- MS: Okay.

MS: ...off the hook.

FS: Yes. Okay. Thank you.

MS: Okay.

MARK LLOYD

MARK LLOYD: So I want to thank John and the Economic Policy Institute for inviting me here and including the concerns about broadband. I know both the governor and the congressman referred... I'm going be very brief here. And I just wanted to bring your attention to the economic snapshot that the Economic Policy Institute provided for your packet and just wanted to make sure that you saw that, and wanted to suggest a couple things. So the first is that this is 2008.

It is extraordinarily important for us to begin looking toward the future, and the future really is broadband technology, it is advanced telecommunication services and it cuts across almost every area of American life that we can imagine. This is something that clearly has an impact on schools and educational services, both K through 12 and continuing education. It clearly has an impact on the availability of healthcare services, it impacts government services, it impacts clearly the economy and our economic competitors globally, it has an impact on public safety.

And, more important, giving-getting to something that Congressman Blumenauer suggested, which is if people knew,

which means that it has an impact on our democracy. The vision of communication services in this century is that we will actually be able to break the stranglehold of a few networks and a few cable channels and a few newspapers and actually allow people to be able to communicate effectively with large and broad audiences in a way that communicates, again, very clearly. And broadband is necessary for this.

And let me give you just a few quick snapshots of what's happening right now. There is a battle going on between whether or not folks who believe in the market as a solution (and Governor Rendell sort of touched on this) and whether people think that government can actually accomplish things. Now there was a major generation gap between those folks who grew up during the depression and decided that maybe government could actually help the market out on a few things here and there and those of us who have no memory of the depression and really don't have much faith, after Watergate, in government.

So this battle continues. An organization called the World Economic Forum has just come out, just a little while ago, a couple weeks ago, with a new measure of broadband in the world, and what they look at is the quality of what they call "telecom competition", the extent of government

regulation/taxation, the level of financial market sophistication, the climate for innovation and entrepreneurship, the availability of engineers and scientists, and the technology aptitude of business, government and consumer (inaud.).

Based on this the World Economic Forum has put the United States at number four worldwide in terms of broadband. Again, this is not based on how many users, right, or how deep the penetration is of broadband. And so to some extent part of the community that has been for years excusing the fact that the United States has been falling steadily behind in broadband is now making another argument. They're saying, "Listen [quote/unquote]. Even if the United States doesn't have the deepest broadband penetration or the fastest networks, it's got a keen ability to capitalize on what it has."

According to the Communications Workers of America, the U.S. median download speed is two megabits per second (the vast majority of users don't have anything close to two megabits per second) compared to 17 megabits per second in France, 45 megabits per second in Korea and 61 megabits per second in Japan. And this is what our young people are competing with. So one of the big challenges that we face

is that there are a number of models of determining where we're going or how we're going to invest in broadband penetration.

There's something that some scholars call the sort of Nordic Northern European model which is a very democratic but also very driven toward competing in the world, and they have focused on making sure, using a wide variety of means, that there is fierce competition for broadband services,-that those services are integrated heavily in healthcare especially and education secondarily. And they have, again, incredibly fast broadband penetration speeds.

Another model was what's referred to as the Asian model which is very focused on experts on government on top-down, making sure that we put-that those governments invest in technology and infrastructure. And, again, it's a very top-down model less focused on things like incorporation into education and healthcare services but very, very focused on making sure that there are very, very fast lines or wireless services going across the nation, which explains why in Korea and in Japan the speeds are so fast.

And then we have essentially the U.S. model which relies largely on the market to determine whether or not we've got

integration or not. And I think if you look at the comparison here you can see how well our market is doing. Speaking at the Forum Web 2.0 in London, Jim Cicconi, Vice President of Legislative Affairs for AT&T, warned that the current system that constitutes the internet will not be able to cope with the increase amounts of video and usergenerated content being uploaded.

The surge in on-line content today is at the center of the most dramatic changes affecting the industry. In three years time 20 typical households will generate more internet traffic than the entire internet today. Chicconi said that at least \$55 billion worth of investment is needed in new infrastructure in the next three years in the United States alone. He claimed that there is going to be an unprecedented new wave of broadband traffic and that this traffic would increase by 50-fold by 2015.

Eight hours of video is loaded onto YouTube every minute. Everything will become high definition, and high definition is seven to 10 times more bandwidth hungry than typical video today. Video will be 20 percent or 80 percent-video will be 80 percent of all internet traffic by 2010. Now the challenge with this is that AT&T and Chicconi's vision is that the answer for this challenge is the private

industry. That only the private industry can provide these benefits. Now the fact of the matter is Japan, which is not relying only on the private industry, is actually ready for the challenges today, but we, relying on the private industry, are not ready for the challenges today.

As Chicconi says, the internet is not created by an act of God but is upgraded and maintained by private investors. Al Gore might dispute some of that. Another factoid: A nationwide public safety network seems even more remote today than it did after Katrina and after 9/11. We are very clear about the fact that we need a robust and ubiquitous national public safety telecommunications network so that citizens can communicate with each other so that they know to leave when a hurricane might strike or a levy might break, so they can communicate with their children if there is an attack on an American citizen or port.

We know that we need to have the infrastructure, and it can be wireless or it can be wired infrastructure, but we know that we need it. We've known for years that we have to have this public safety network in place. When I talked to reporters who call me up from trade industries, they go, "Why do you talk about... Everyone knows that we need to

have a private safety network." Well, most Americans sort of assume that we've got one. We don't have one.

One of the plans to get one was to auction the spectrum that the broadcasters will be forced to leave in mid-February next year and make sure that there was a piece of what was being auctioned off that would be reserved for, again, a public safety network to be able to communicate wireless nationwide, so at the very least the police and the firefighters, whether they are with the state or the county or the federal government or the local police authority, were able to communicate with each other during an emergency.

We had clear failures during Katrina and during 9/11. Again, there's no question that everyone who looks at this understands that we have a major problem. Well, guess what? They auctioned off the service but no one decided they were going to buy. The private industry decided they would essentially avoid investing in this public safety network for wireless communication services. The high bid was \$472 million by Qualcomm, but the FCC had placed a value on this of at least \$1.3 billion.

Now part of the spectrum that was not going to be reserved for public safety use was purchased by AT&T and Verizon for roughly \$19 billion. Again, the minimum bid for the public safety part was \$1.3 (billion). There's no question that there's incredible value there, but whether or not-the way that we're approaching this (which is, again, very marketbased, which is relying on the private industry to solve a public safety problem) doesn't seem to be working particularly well.

But Karen Tandy, Senior Vice President of global governmental affairs at Motorola… [AUDIO GOES OUT] …that we've got to use this spectrum to create a nationwide broadband network for first responders but this must be done while creating a valuable commercial business opportunity for the operator. So we have a conflict here. We don't want to rely on the government because we don't believe that government is capable of addressing this set of issues. The business models that we seem to be relying on, like the business model for wireless Philadelphia which failed miserably, don't seem to be working very well.

So we need to find a way actually to come together on this. I think Governor Rendell made it fairly clear that the government has to step in, and I would argue that where

public safety is concerned, that where there is response to a terrorist attack or a national disaster, it doesn't make an awful lot of sense to rely on the private industry to protect us. Does it? So we need to-we need to come together on this issue. And, again, I would argue that in addition to public safety, one of the most important questions, which is the question Congressman Blumenauer raised, is if people only knew.

All of this information is public, almost everything that's been discussed in this forum is public, but somehow people don't know the value of broadband is to give power to the Economic Policy Institute and a variety of other organizations so they can communicate effectively over the gatekeepers of information so the American public can know. And with that, I just want to thank you very much and particularly, I appreciate your patience. [APPLAUSE]

UNIDENTIFIED MALE SPEAKER

- JOHN IRONS: We're running quickly out of time but let me see if there are any questions for either of these last two presenters.
- LARRY MISHEL: So, Mark... This is Larry Mishel, President of the Economic Policy Institute.

MS: Hi, Larry.

- LM: So the market doesn't work to solve all our problems. I think that-I think that's a message worth saying. What would be your plan for the way forward to build out the broadband so that it would be-you know, penetrate rural areas, penetrate inner city, you know, to fill in where the private sector has failed to go?
- ML: Well, I mean, the only thing that's worked in the past is really that both national federal leadership involving the states and municipalities, but also trying to create a working relationship with private industry. That in order to get the telephone system both national, federal leadership involving the states and municipalities. But also trying to create a... a working relationship with private industry. So essentially when we... did this for... telephone service early on and the myth is that somehow AT&T built this incredible, you know, ubiquitous telecommunications network. The... our telephone would not have been built without the Rural Utility Service which as an adjunct of... the Rural Electrification Administration created under the New Deal.

In order to get the telephone system built the way that we have it built now, you needed federal investment and that investment was both direct investment in the infrastructure

itself, the poles, the wires, the land... everything else that you needed but also loans to local telephone cooperatives... so that they could establish telephone service in rural areas where the old Bell Company didn't think there was a business. And the fact of the matter is, because they were able to establish communication services in rural American, there were more people talking on the telephone then ever before.

So we've always had federal investment, the same this frankly true of... the highways. And so Roosevelt... Truman and Eisenhower clearly put together a state, local, federal partnership. Eisenhower was clearly concerned about defense, the story that's told is that Eisenhower went around the... the roads in Germany and saw how smooth the Autobahn was and wondered like why don't we have something like this in the United States? He went on his... on a... a tour of... traveling tanks across the country to California and saw how bad the roads were.

Well if we went to Germany today or Japan or China and we saw what they were doing in terms of broadband services and wireless communications, maybe another Eisenhower would say, well if they can do it, if they can have federal investment, working with local provinces and the local

governments and whatever to make sure we can build out the modern roads, the electromagnetic spectrums so that people can communicate effectively, then maybe we can actually build these networks.

And so I think that there has to be a partnership... but we need federal leadership to pull the different parties together. And it's... it's not the technology, the technology is there to get it done, okay.

- MS: (Unint.) I want to point out the irony that... that the problem getting for... Internet to some kind of broadband for national... for public safety and when it was originally built for the purpose of national security.
- ML: Exactly.
- MS: So there is an irony in that. The question I have is one ...
- ML: Yeah the private... the private industry built it right?
- MS: Not in... well I won't go into... there's a whole history on that. The question... couple of questions quickly, one is... that to what extent, I mean you talked about reaching homes with the broadband, to what extent are we reaching our workplaces and how extensive and how does that compare quality-wise for internationally? Cause obviously... that's a very critical part of our economy. And the second question I have... you know there was... talk and work's supposedly going on with government funding, on a new I

guess an NII - national internet infrastructure whole new generation. And I was just wondering about the status of that?

ML: Well… we're at… the penetration of broadband, the workplace is… is going relatively well. The challenge is that workplaces are moving to go to where the broadband infrastructure is. And so in small town America… in… small rural towns, in towns… actually not very far from some central cities… you end up with… car dealerships having to leave the towns that they are in because in order to service a car today, you have to have broadband infrastructure.

So... this is a major challenge in rural America, if they're going to keep the jobs that they've got in their communities, they must have this infrastructure and... we have a major challenge with the fact that in many cases the infrastructure is just not there. There is a very interesting project called Connect Kentucky, that a number of people have been talking about... that is doing I think the first job of just trying to find a way to intelligently and rigorously map where advanced telecommunication services are.

But one the challenges with Connect Kentucky and I'm all in favor of that model, but one of the challenges is that in working with private industry, they don't do a particularly good job of talking about the speeds. And so we define broadband in the United States as 200 kilobits per second. They define broadband in Canada is like two and half to five megabits per second. So sometimes when you see these maps about comparing broadband, what we call broadband wouldn't qualify as broadband in many countries.

So we can say where broadband is according to our definition, but in terms of where truly advanced telecommunications are, we don't really have a very good picture here in the United States. I mean we're making some progress on that, but... the notion that somehow we don't really know is... is amazing. But again, businesses... understand that if they're going to stay in business... they have to have broadband infrastructure. And if it's not in their communities, they move to another community. Thank you.

[APPLAUSE]

JI: And obviously these are issues that are not going away, both our physical infrastructure and our informational infrastructure needs work not just this year, but for years

to come. So I want to thank everyone for... for coming today to talk about these issues.

- END -