

Weight of the Nation: CDC's Inaugural Conference on Obesity Prevention and Control

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Health in All Policies I: Nexus between Transportation and Obesity Prevention

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MR. FENTON: My name is Mark Fenton. I am a public health and transportation consultant, but I would submit to you that the most relevant experience I bring to this discussion, is that I serve on my local planning board, which has been an extraordinary education in how local transportation and planning decisions are made. I want to start this discussion by telling a story a story of a guy who in 1919 was a young lieutenant in the United States military. And he volunteered to take part in a really unusual experiment that the military was doing. They were going to try to have a truck convoy ride all the way across the United States from the East Coast to the West Coast in 1919. Trucks were a new idea, let alone the notion of a roadway network that would get them across. In fact his biography, if you read it, talks about the fact that a lot of bailing wire and chewing gum held those vehicles together because of the poor quality of the roadway system in this country in 1919. This same fellow turns out to be a pretty good staff officer to the degree that by 1944 he was the supreme commander of the allied forces in the European theater. He, therefore, oversaw the Normandy invasion and the movement of the allied troops into the heart of Germany, the defeat of Germany and during that time he was very intrigued by the German Autobahn system. Having had that experience with the roadway system in the United States decades before, he said: This is amazing, these roads, that allowed them to move men and materials around Germany.

When this man came back, he was recognized as an American hero and eventually elected president. And in 1956, Dwight Eisenhower signs the first federal highway bill, which at the time was called the National Defense Transportation Act. He began to change the complexion of transportation in this country. Planning and zoning norms separated where we lived from where we worked because factories were really dirty back then and we didn't want them close to where we lived. The massive growth of the middle class drove what I call now the story of four. It's essentially the number four and add zeros to it. For example 4,000. We kill 4,000 approximately pedestrians in this country every year. Add another zero and it turns out that roughly 40,000 Americans die in motor vehicle crashes every year. Order of magnitude 400,000 - that's roughly the number of premature deaths attributed to physical inactivity and poor nutrition, the so-called obesity epidemic.

The interesting thing about all this is I think that there's been a massive shift in the design of our communities. Robert Putnam calls it "The Suburbanization of America." He shows this dramatic shift in population in just the 50 years or so since World War II. We went from largely being a rural nation to, not an urban nation, but a suburban nation. And it has much to do with this new transportation system that we have created. Now, is there any proof that there's a connection between this shift in urban design and transportation norms? In fact, there is quite a body of literature that's building all the time. You tend to see less routine physical activity, higher risk for obesity. And as you see people spend more time in automobiles and physical activity time goes down. What's striking is we continue to build this model. Many of us would say, maybe we ought to really think about what it is we are building, both the physical layout, the land-use planning of our communities as well as the transportation systems that serve them. It hasn't changed for the last 20 years. This is really important because it suggests we have got to look for other ways to get people active, get them active as a part of daily life, hence this environment in policy discussion. A quick side note: I am not saying let's talk about transportation and planning over here so we can talk about physical activity, and then the food and nutrition stuff is over here. Oh, contraire. I would suggest that as we start to think about land use and planning, we are also talking about things like more compact neighborhoods, which conserve nearby farmland, and that nearby farmland can shorten the farm to table distance or place Phase IV everything from community gardens to community supported agriculture to where farmer's markets will occur, to even zoning codes determination of things where like where drive-thrus and fast-food establishments can be located. In other words, there is a nexus between the physical activity and the nutrition sides of this story, and one of the nexus points is, indeed, at land-use planning and transportation. We really have to be talking about them together.

Now, we are joined here by a really impressive panel. Somebody asked one of the people from the Seattle transit authority, why would you invest so much taxpayer money to this new public transit and then take away our parking, because they were going to do parking permits in the areas that were near transit stops. And shockingly, the spokesperson for the transit authority said, because light rail is meant to be fed by people taking the bus, walking or bicycling, it was not meant to be fed by cars. So my question is how do we get this behavior, attitude, and philosophy to be emulated around the country?

MR. SAELENS: The rest of the story is that I think they created parking zones around these light rail stations, not for physical activity purposes, but because they felt the neighborhood would be angry by having more cars in the neighborhood. So, I think the physical activity aspect is a consequence of that policy, but it wasn't directly targeted toward public health at all. And another anecdote, we are trying to understand the impact of this light rail system on physical activity and we approached Sound Transit, which is the agency that's building this light rail, and they had never even told the question that we are asking about physical activity and walking. So, very interested in ridership, very interested in getting kind of deity mandated ridership estimates. But as Senator Harkin referred to, there is no assessment of health within

their current mandate for evaluating the impact of light rail. There is less interest in that than you would expect.

MS. HUBSMITH: I would say that there is a big opportunity for us to bring public health to the discussion when we are talking about transit systems. And in the North Bay near San Francisco, we've been working for more than ten years to pass a light rail system. And you need 66.7 percent of the vote in California to pass a transportation sales tax. We got 65 percent in 2006. So, we really went to rethink things for 2008. And we brought public health, environment, transportation, redevelopment, everybody to the table to say: We really need a complete system. And as a result, we were able to pass the measure. It's going to establish 70 miles of a light rail system. And five of the stations have no parking at them at all. And we were able to get a funded bicycle and pedestrian pathway for the entire 70 miles as part of that by saying we are going to be able to get people to the rail stations in a healthier way. And actually, some of the cities that opposed it in 2006 because they didn't want to have more traffic and more parking in their neighborhoods, supported it when we brought in the public health aspect. So, I do think it's possible, but we need to come to the table early on.

MS. CRADOCK: I was just thinking about how often using health as a criteria for transportation funding and project implementation as a good strategy, and we can all work on it in our local communities and at the federal and state levels.

MR. FENTON: We all talk about the skyrocketing rates of childhood obesity. But what's notable is you can sort of compare them to the same time period, what happened with pupils traveling to school, and you see this dramatic drop in the number of kids walking and bicycling to school from nearly half of the kids to less than 15% today. One of the big structural changes that occurred is you go from a substantial portion of kids living within two miles of school to a dramatic drop. Those are kind of alarming trends and it says what's happening with regard to how kids get to school and it says there is something probably about the school setting as well as social norms. And when you ask the question what's sort of leading the charge there, well, it can be structural stuff like sidewalks and bikeways and things like that. But it certainly can be where schools are being built. I'm even amazed at how often I work with the school where the very traffic induced by that school, so the number of parents dropping off and picking up at the school, are a deterrent to other parents from having them allow their child to walk or bike to school, thereby they then start driving, so it becomes this downward spiral in which the traffic is moderately bad, other parents are afraid of that traffic, don't let their kid walk or bike, they then add to that very traffic. And, of course, there is this whole personal safety, stranger danger, the fear of abduction. So, there is this kind of shift in social norms from as recently as 30 years ago. And the Safe Routes to School Program to me has huge promise. I work hard with a lot of communities for the idea of a comprehensive level of intervention at the community level, everything from structural changes, environmental engineering, improvements, missing sidewalks, crosswalks, hiring crossing guards to education programs, enhanced enforcement, safety education, programs, but -- oh, things like walking school buses. How many here have actually heard of a walking school bus? The notion of a designated route to school, and then an adult will walk or, a bicycle train, where an adult would bicycle picking kids up along the way like a bus but on foot or on a bike? Here's my question: Where are the schools in this conversation? Where are the departments of education? The is the funding? The Safe Routes to School funding comes through the Department of Transportation. Departments of health in many states have been really active. But in many cases we are actually trying to convince principals, administrators, let alone parent/teacher organizations to do this. If we think about what it is we want to measure among youth in America, certainly measuring and reporting BMI is one of the hot topics. But I would ask the question, what if every elementary school in America had to measure and report its mode split, that is, how kids got to school, what travel modes they used. Scotland just did fairly recently. A hands up survey that did just that. The morning when kids did their attendance, they also were asked, how did you

get to school this morning? Fairly low-budget data collection technique. Interestingly enough, when you hand that data to a principal who thinks he is providing and writing a budget every year to provide busing to 70% of his students and he realizes only 35% of them are actually riding the bus. He is paying all that money to run a bunch of buses at near half capacity. So, is there a way to get the education officials involved? How do we get the education community hooked up on Safe Routes to School and then environmental change?

MS. HUBSMITH: I think that by virtue of the fact that there's now \$612 million available nationally for the Safe Routes to School Program we have provided an incentive to bring schools to the table. If we just tell schools, get your kids to walk and bicycle, and we don't provide resources to make that happen, and they are under strict government regulations associated with "No Child Left Behind" and they are trying to meet test scores, it's difficult for them to think about ways to get involved with improving the community. But what the federal Safe Routes to School Program has done, which was approved in 2005, is it provided this funding to the departments of transportation, and it's required that schools and cities actually work together to come up with plans to make improvements both to the infrastructure surrounding the schools, their sidewalks, bike lanes, traffic lights, but also to education, encouragement and enforcement programs. So, that's been really exciting. But what we need to do is thinking about it on a larger level, on a more macro level. How can we get it up a national level, the state level and the local level? And I think we need policies, we need goals, we need data, and we need examples. On the national level, how can we bring the idea of Safe Routes to School and physical education into the national physical activity plan that's being created right now? With the next authorization of the "No Child Left Behind" -- I am not calling it a reauthorization because we are hoping it's going to be something totally new -- how can we make sure that the research that has come forward about the fact that when kids exercise and have physical activity before school that they have better memory, better academic performance, and better behavior in the schools? As we are talking about school settings and the fact that many schools are being located out of the urban core and into areas where they need to be bused or driven in parents' cars, we need to take a look at how can we have joint use policies. How can we bring the education to the table to encourage community centers in schools? And at the state level, how can we remove disincentives for renovating schools in the urban core by actually providing formulas through state allocation boards that are going to make it possible for school boards to choose the right thing and say, I am going to have a local-oriented school. And then at the local level, with the mandate for wellness policies, let's make sure that we get schools and safe routes to school and activity before and after school as part of those wellness policies and really work to address the walkability of the entire school district and build those collaborations between the cities and the schools. And I think we are off to a good start. There is more than 5,000 schools that are now participating in the Safe Routes to School Program. Senator Harkin has authored a bill, Senate Bill 1156, that now has ten senate co-sponsors that would actually increase by five-fold the amount of money for Safe Routes to Schools, which again sets up more incentives for those types of partnerships to take place.

MR. COHEN: I feel like you're blaming the schools. Schools, teachers and administrators are in a very difficult and pressured situation. They don't have enough money. They don't have enough time. They don't have the resources for physical activity in the schools. This seems like able an external and distracting issue. And a lot of that came from politicians and from all of us in the community. In most of these meetings, people say where are the educators, where are the schools? We often design meetings in a way that are not inconclusive enough. I think we have to kind of go back and figure out win-win situations. I would be looking at test scores that say, look at high scores for those who are physically active as compared to the low scores and let's look at the activity. And I don't know what the answer to that would be. But if it's what I would suspect, then the schools would be a lot more invested in physical activity. But we need to do it together as opposed to blaming them.

MR. FENTON: Let's take a look at how we actually have spent transportation dollars. The next transportation authorization is looming. Remember that highway bill that Eisenhower started back in '56 that now happens at about a six-year interval to the tune of \$300 billion. For the amount that we are spending, the bike and pedestrian project implementation is measurably less likely in areas of persistent poverty and lower education levels. Now, those are areas where we see higher rates of obesity, lower rates of physical activity attainment, and fruit and vegetable consumption. So, this correlation with income level and education level is disheartening right on through to the environmental aspect of it. I would like to talk about how do we get at under-served populations because so often the presumption is this kind of stuff gets spent at the local level because there are local activists. So, trails get built because there is a local trails coalition that's out there ready to go to work with the rails-to-trails conservancy and right for a transportation enhancements grant or CMAC money, the congestion, mitigation and air quality money. So, great, if they are there and able to do it, but what about underserved communities where we don't have that level of engagement?

MS. CRADOCK: So, we've talked about using this balance of carrots-and-sticks approach, and I think we could think of it as different levels: federal, state and local. We found that counties characterized by persistent poverty and low educational teams where residents were about 30 percent less likely to have implemented a bicycle and pedestrian project during the period of our study. So, I think there -- the carrot approach we can think about maybe having something akin to this non-attainment area for health where you have a program that focuses specifically on areas of high health need and that have historically not necessarily have the investment in bicycle and pedestrian infrastructure. So, that's one policy strategy. You can apply for these, but then you also need to have the technical assistance and planning assistance at these local levels. There are a lot of hurdles that you have to go through in order to implement a transportation project. And so providing that sort of technical assistance and training at the local level would be an important step as well. And the third thing I think would be to lower or waive matching requirements. A lot of federal programs require that the states or local areas provide matching funds to receive federal investment for transportation projects implementations. So, if you remove that barrier, then you will increase the likelihood that they will be able to successfully apply for the project.

MR. COHEN: Well, you know, generally equity is the second question we ask, and I think equity has to be the first question we ask. I think that this is largely a political problem. I think the solutions are very tangible, doable solutions, and it's mostly a question of political will. When Janelle Krishnamoorthy just talked about the Harkin's bill and all the work going on in health reform, there's a companion bill written by Donna Christianson who heads up what's called the Tri-Caucus Brain Trust that's the Black Caucus/Latino Caucus and Asian/Pacific Islanders Caucus, and they basically have an equity bill. And as I understand it, Nancy Pelosi has said, all the elements of the equity bill are going to be in health reform. I certainly hope that's the case because one of the elements of that is what's called "health empowerment zones;" and the way it's written right now, half the funding would go to disadvantaged communities, and that's a very, very good place to start. But I would also say that this equity bill needs to be applied to the transportation bill. And we need to start taking equity seriously. It's a political question. You know, we are disenfranchising communities and then saying, hey, look at them. And frankly this is part of our responsibility to fix that. If we don't advocate for equity as much as we advocate for health, we are not going to get there. And that's something that we all have to do.

MS. HUBSMITH: We recently took a look at how states were spending their Safe Routes to School money and what states were doing in order to really reach out to the disadvantaged communities. The communities that are most vulnerable to childhood obesity have the most levels of poverty. And we found that there are about 10 states throughout the United States that are taking different measures from adding points onto the application if they made certain levels related to the medium household income, or targeting

training to certain areas to help them write their grant applications because they don't have money for fancy grant writers. And actually the Safe Routes to School Program is a 100% funded government program. So there's no local match that's required. So that automatically helps to create a more level playing field. But unless there is specific outreach and specific training and specific scoring that's required that really helps to boost the ability for these communities to get the grants, and then also to implement them, because oftentimes when you get a federal grant, it comes with a lot of federal paperwork. And so one of things that we worked on with Senator Harkin and his staff and the bill that he introduced on Safe Routes to School is that there is a provision that's added about specifically having states develop policies that relate to equity to ensure that the funds are reaching the communities that need it the most. And also the data is collected for that. And we are working with the Prevention Institute, right now in California, to do an analysis of how the Safe Routes to School funding has been spent over the last ten years and where has it gone and what do we need to do to make changes.

MR. FENTON: And keep in mind that Safe Routes to School kind of came out of California originally before it went to a national bill.

MR. SAELENS: I guess the one thing -- maybe not necessarily an equity issue, but one I wanted to point out because we certainly find this in our data and other people find it in theirs. There has to be destinations. So, this idea of building pedestrian infrastructure and bike infrastructures has got to be places to go to. And I'm not a transportation or urban planner. I don't know how you create those synergies. But school setting is a perfect example if that's a place a child will go each day. And if we don't create those places, we can build the best infrastructure in the world. People are not necessarily going to use it. And it's going to be a place that's just built and no one uses.

MR. FENTON: -- and obesity and prevention. Because if we don't do the land-use piece right, the other doesn't matter.

MR. COHEN: And it should be called transportation land-use -- I won't use the "O" word, obesity prevention, because I think it stigmatizes. And until we face the fact that, not just in low-income communities but everywhere, one of the main reasons that people are not going out and are not physically active has to do with safety. We have the ability in this country right now to fix our violence problem. It's again another question of political will. It's a question, not even of new money, but of moving money. We know what to do. For chronic disease, many grassroots communities are saying right now, we can only focus on nutrition and activity, healthy environments, if we deal with safety at the same time. And we now know what to do. We know how to make communities safe. People have been trying to figure this out for the last 20 or 30 years. I am confident we can get the rates down dramatically and keep them down in every place in the country if we put the resources and the political will into that.

MR. FENTON: You've heard of the campaign for Complete Streets, and if you've not, go to their website <www.completestreets.org>. But the fundamental premise of the Complete Streets is simply this: Any time we touch a road, whether we are paving a new road, building a new road, striping lanes, you've taken into account all four user groups: Pedestrians, bicyclists, transit, and motor vehicles. It doesn't mean you stripe a bike lane in every road, it just means you ask the question: Where are we going to accommodate all four? Should we actually be requiring Complete Streets? So, if you get federal dollars on a project, you are going to at least have done some form of a Complete Streets analysis. So, let's all speak up. Let's let our senators and representatives know that, because when transportation reauthorization happens they need to hear, this is a priority, and it's a public health priority. It's our job to weigh in on that and say so.

In Georgia the Buford Highway is the most dangerous roadway in the area for pedestrians and, indeed, a disproportionate number of Hispanics are killed on that road. And, in fact, it's the local pedestrian advocate

group PEDS that must be using this as an outreach and education and awareness opportunity. It's really striking to me that they said we are going to do it in Spanish obviously. You know, we are not going to just write it in English. There is a document called the Transportation Prescription at the Prevention Institute with partners has put out that really speaks to this notion of how we can write a prescription for healthier transportation nationally. But the fundamental question: We are in the middle of a recession. You're talking about things like health impact analyses? The notion that like an environmental impact assessment when you go to do a new transportation project; when you do new zoning, you should do health impact assessment. What are the health impacts? Well, you've just added another layer. All that does is add costs more money. Plus, you are going make me add bike lanes and pathways on the side of the roadways. And that's going to cost more. And we are at a time when we've got highway bridges falling into the Mississippi River. We've got an aging transportation infrastructure. We've got to fix the highway system we've got. Eisenhower would be rolling over in his grave right now to think we've let this happen to our highways. And you want me to build bike trails. So, what's our answer to that?

MR. COHEN: Well, I think the question about rebuilding bridges is a legitimate one. I think we need to rebuild our bridges. The last time I was in Minneapolis, someone took me out for dinner and there was this unbelievable pink bridge, and it turned out that pink bridge was the bridge. That pink bridge is the one that had collapsed last year. It's now rebuilt. It's lit up. It's part of a beautiful community. It's a destination. And so there may be times when good solutions solve multiple problems. I don't think the question is should we rebuild crumbling bridges or should we have bike paths. I think the question is, as we rebuild crumbling bridges and have bike paths, what should the balance be? And I don't believe the question is money because we are about to spend a huge amount of money on transportation. And I think you gave part of the answer already. And part of the answer is that we need to complete our streets. Our streets are not complete. There is more money in the transportation bill returned to states and ultimately to localities than in any other expenditure coming out of the federal government. That's the big one where the money comes back to states and localities.

MR. FENTON: Did you hear what he just said? It is one of the largest ways your tax dollars come back to your community. I think we all need to be acutely aware of that.

MR. COHEN: And we are talking about injuries. We are talking global warming. We are talking about asthma. We are talking about vehicle emissions. We are talking about physical activity, the issues of this meeting -- and notice I don't say the "O" word -- and yet -- and we are also talking about quality of life, good location, enjoying places to go. We can change all that. The other point I would make while I'm saying this is what we are about. What we are really about is norms change. And in my mind, norms change is like a snowball. And it's not just, gee, there are some savings and some costs come rather, you know, there's a set of costs. But as it speeds up and as I speed up -- because we're running out of time. As it speeds up, it gets bigger and bigger. You had mentioned that I did -- it was the country's first multi-city, no-smoking law. We had 40 percent of the restaurants with no smoking and 60 percent with smoking. Obviously if you move the smokers to one side and the no-smokers to the other and we have the air quality we have in this room, that's not going to prevent cancer. But it did. And the reason it did was it was a step in norms change. Completing the Streets is the beginning of a whole norm in the way we live. In some ways a norm back and some ways a new norm forward, but it's a much healthier, much more satisfying norm. That's the way to spend our money.

MS. HUBSMITH: So, when someone says: We can't afford this. How can we do this? My answer to that is: We cannot afford not to invest in our communities and in walking and bicycle and pedestrian pathways. Think about these numbers. Only one percent of transportation funding from the last federal transportation bill went to walking and bicycling, when those modes of transportation represent 10 percent of all trips in

America. And then when you analyze the fatalities, bicyclists and pedestrians represent 13 percent of all trips. So, if we want to start talking about equity in terms of safety and the transportation system, we need to be able to boost what we are investing in those modes in order to make it safer. And studies have shown time and time again that when you actually begin to create the networks, you not only get more people walking and bicycling, using public transit, getting to their schools on feet and bikes, but you are also have a healthier population, more people that are participating in those activities, and injuries and fatalities go down. And then just one other number is that 50 percent of trips in the United States are three miles or less in length. Just imagine how we could be meeting the Surgeon General's recommendations, the minimum recommendations for physical activity, if we just spent an incremental amount of more federal funding to completing our transportation networks throughout the United States. And how would that revitalize our communities and create an economic stimulus for people to get out there and patronize their local businesses and make our communities safe or healthier places to live? We can't afford not to invest in this.

MR. FENTON: Does anybody know what show Alex Trabek hosts? Jeopardy. And in Jeopardy, they give you the answer and the contestants have to provide the question. This is the answer: I'm looking for a question from the contestants. Over 80 percent of Americans now average at least 150 minutes a week of physical activity, much of it without specifically or consciously going out to exercise.

MR. SAELENS: What are gasoline prices? They rose and stayed at \$10 a gallon. And one of the reasons is I think that this conversation starts to become a personal, individual choice conversation in households that go to elected officials that kind of snowballs. I mean, we can talk all we want about all these great -- this great data. But until you get the soccer mom mad at the fact that she's paying \$10 a gallon, we're not going to get the transportation changes that we need.

MS. HUBSMITH: My question to the answer is: What is the Safe Routes to School Program and how did it change the habits of an entire generation?

MS. CRADOCK: What is the change of three quarters of the parking facilities to bicycle parking facilities in large cities done?

MR. COHEN: What happened after some small conference that took place in Washington D.C. when some people stopped sitting, laughing, applauding, got up, called our colleagues, built a movement, supported the health reform bill, supported a progressive transportation bill and insisted that these are life-and-death matters.

MR. FENTON: If you look at vehicle miles traveled in the United States and it's an upward rise over the last 20 years, what's mind-blowing to those of us that study and work in the transportation field is that little downward tick that we thought was going to last for one quarter back in 2008 when gas got to \$4.00. It processed through the fourth quarter and now the first quarter of 2009 this downward trend in national vehicle miles traveled. This, to anybody who has been looking at this stuff for a while, is mind-blowing. And it suggests that we did, in fact, find the point of inflection what we thought was an inelastic demand curve for gas, but it turns out it does have some elasticity of demand and people start to get ticked at \$4.00 a gallon. And more will be at \$6, \$8 and \$10a gallon. That's the level of policy change that we need here.

I can't thank you guys enough for an outstanding session. A couple of websites: the Complete Streets website; Safe Routes to School; Safe Routes Partnership; the National Physical Activity Plan. That is a parallel effort that's going on right now to look at the development of a national plan for the promotion of physical activity. I would urge you to go to that site. And T4America, Transportation for America, T4America.org, would be a great place to start to understand what the advocates for bicycle, pedestrian and

transit use -- what they are really asking for in this reauthorization, and you would learn a lot right there.
Thank you very much for an outstanding session.