

Livability: The Challenge Ahead
Symposium Summary
February 3, 2011

Rudin Center for Transportation Policy and Management
New York University Robert F. Wagner Graduate School of Public Service

On February 3, 2011, elected officials, planners, designers, researchers, and others gathered to consider the future of New York and other cities across the nation, focusing on the issue of livability. Speakers and panelists discussed how to make cities more livable, in the face of climate change and the myriad other challenges facing urban areas.

Welcome and Introduction

Mitchell Moss, Director of the NYU Wagner Rudin Center for Transportation Policy and Management

Professor Moss welcomed everyone to the symposium, and emphasized the strides taken by the Federal Highway Administration on the topic of livability. He commended FHWA for bringing this symposium to a university, enabling a discussion among academics, government, and practitioners.

Michael Davies, Acting Division Administrator, Federal Highway Administration

Mr. Davies underscored that livability is a priority for the Administration and FHWA, and he hopes that a focus on livability will facilitate decisionmaking that the public deserves. Reviewing the six Livability Principles, he emphasized key priorities for FHWA and transportation planning, including providing a variety of transportation options, respecting existing communities, and leveraging existing investments. He also underscored the importance of planning in order to bring investments to the right places.

Keynote Address

Matthew E. Kahn, Professor, UCLA Institute of the Environment and Sustainability

Professor Kahn presented on the future of cities in the face of climate change. He framed his discussion in the context whether free market capitalism is a friend or foe of the environment. He argues that capitalism bundles quality and quantity and presents potential means of adapting to climate change. He provided the example of ozone emissions per mile have fallen faster than miles driven have increased, showing that capitalism can provide environmental improvements.

In the case of cities, they are capitalism's growth engine. Attracting and retaining creative class is the key to sustainable urban economic growth. A city's greenness is a key determinant of quality of life and livability. Therefore, cities will necessarily focus on climate change mitigation

and adaptation. Already, some of the biggest cities emit the least carbon. In addition, liberal, wealthy parts of the country, “the coasts,” have political representatives in favor of mitigating carbon. These “blue states” also use less electricity per capita. Kahn frames the choices and actions of these urban areas as “green guinea pigs” that can show what works in terms of climate mitigation and coping. New York City’s efforts are crucial. Household carbon dioxide, estimated as the sum of household transportation, electricity, and heating costs, is particularly low in New York City. Some of the reasons are that people live in apartments, in smaller housing units generally, they use public transit more, and they work in a concentrated central business district. Generally, suburbanization of employment increases carbon footprints, as it is associated with living in suburbs in larger homes and driving to work.

However, given the growth of China and India and US’s greenhouse gas emissions, Kahn asks how will cities “thrive” in a hotter world? Facing the challenge of climate change, are cities doomed? Kahn is optimistic. Urbanites will make the right choices to protect themselves from climate change. Urban dwellers are not passive victims of climate change. Capitalism has caused climate change, but it will also facilitate adaptation. Moscow had a heat wave within many deaths in the summer of 2010, but now Muscovites will invest in AC, ventilation, heat alerts, cooling centers, and other adaptation strategies. Cities can anticipate future suffering, and try to adapt. Still, capitalism can’t fully mitigate the change in climate.

Kahn compares the “War on Terror” to climate change adaptation. The War on Terror has a strategic opponent that seeks out new weaknesses. In case of climate change, we can better predict the “opponent,” in other words the consequences of climate change. New York City adapted well to the War on Terror and had a great decade after 9/11. For climate change, the Bloomberg administration has a New York City Climate Change Adaptation Task Force. To prepare for climate change cities should focus on urban planning, information provision, insurance pricing, worst case scenario planning, backup plans, high frequency data collection on climate effects, and initiatives to protect the poor in particular.

Session 1: Livability and Climate Change

David Bragdon, Director, New York City Office of Long-Term Planning and Sustainability

The Federal role in livability has evolved over the past two years. Prior to that, the Federal role was felt through many policies that were not tied together. Land use planning is “ferociously” local in the United States, and many local leaders insist on that. However, the paradox is there has been extensive *implicit* Federal action and policy on land use and the built environment. The first area of implicit policy has been in transportation, where the Federal government has encouraged highway construction, but only lately has supported transit investment. The Federal government has favored new development on city fringes for much of the second half of 20th century. Not in explicit policy, but nonetheless policies such as the mortgage interest deduction and fossil fuel-based energy policy have resulted in dispersed development. Still, all of this has changed in last decade or so. The highway trust fund has not expanded, and energy policy is starting to change. The market for different ways of living is changing too, with an urban renaissance. This resurgence happened during time of Federal indifference to urban

development. Now, however, the President is announcing Federal green buildings initiative to provide incentives for localities to improve building codes to increase sustainability. The transportation bill has not been reauthorized, but moving forward, there should be more emphasis on maintenance and on investment on basis of outcomes. Putting a price on carbon, not likely to happen, but it should.

What's applicable to New York City from Portland? Portland was earlier on sustainability, but New York has been faster. In New York the emphasis has been on efficiency and shaping growth, rather than the environment and stopping growth as in Portland. When the Federal government told localities that highways money could be used for other forms of transportation, Portland cashed in the Mount Hood Freeway, and put money into a trust fund to build a light rail system. New York cashed in Westway, which brought a capital infusion to the MTA. Thus, the Federal government enabled innovation. But to get these change to happen, the citizens needed to be ahead of the local government, and want to create a great places, and not just facilitate movement.

Mr. Bragdon also discussed PlaNYC updates. The city's financial condition is more precarious now and is not in a position to propose major capital investments. Actions will need to be sustainable from an environmental and fiscal standpoint. One example is waste disposal. The cost of waste disposal has gone from \$37 per ton to over \$100 per ton in ten years. This means new, greener alternatives for waste disposal may also be more affordable. Other areas of focus in PlaNYC include water quality, recreation, open space, nature for the sake of nature, and ecosystems. The City is seeking ways to enlist people in solutions. In terms of transportation, there is a need to improve rail and other connections to rest of region.

Irene Boland-Nielson, US EPA Region 2 Climate Change Coordinator

Livability has been a concern for longer than climate change, but livability suggests more than survival, despite the challenges of climate change. We still need to attain livability in a changing climate. Ms. Boland-Nielson described EPA's "smart policy portfolio" of ways to reduce greenhouse gas emissions but also promoting adaptation. EPA is participating in the Partnership for Sustainable Communities with DOT and HUD. The Partnership is fertile ground for addressing climate change as a part of livability. Ms. Boland-Nielson continued to describe toolboxes and information for resource management, the EPA's Climate Ready Estuaries Program, and a climate change indicators tool.

Jerry Fried, Mayor of Montclair Township, NJ

Mayor Fried described what's happening in Montclair, and their focus on changing behavior of individuals to promote sustainability. Montclair is a "Climate Showcase Community," awarded a grant by the EPA. Montclair is built out, so their efforts are more about changing behavior than changing built environment. Montclair is a very transit- and pedestrian-friendly community, which in a built-in advantage. They are promoting strategies for reducing carbon footprint. Initiatives include a Department of Energy grant to reduce energy use in municipal affairs. The town is updating their Master Plan to quantify the current carbon footprint and get a benchmark for future improvements. The town has a grant from Sustainable Jersey to put in

electric car charging stations at municipal lots. In addition, they have a partnership with a Chinese municipality to exchange ideas how to change behavior to reduce carbon. They are also working with developers to build a mixed-use green development, to be a model for East Coast. In terms of transportation, they are setting up the town shuttle to provide information on arrivals. Overall, Mayor Fried sees a need for policies that model sustainability for places that aren't high density cities like NYC.

Louise Harpman, Clinical Associate Professor, New York University

Professor Harpman discussed where architectural and design education is now in terms of livability and climate change. Architects now are trained to think "laterally," in other words, to connecting the dots. We can't fix one problem at a time. Rather, we must incorporate vast amounts of data and research from other fields. How do we transform cities? There is a role for visioning and for visual thinking. It's not just about data. Need to get people energized about what green cities can look like. Architects, engineers, and planners can help with visualization of climate adaptation. Coming together with similar and shared goals can make funding easier. Prof. Harpman used a Toronto plan as an example. She presented several designs that integrate climate-supportive facilities with exciting and appealing design and activity spaces.

John Zamurs, New York State Department of Transportation

New York State has recognized the issue of sustainability and climate change for some time. New York State's Climate Action Plan is one of the most detailed plans of its kind in the country. The State has adopted a goal to reduce greenhouse gases 80% from 1990 levels by 2050. The plan looks at all sectors, including transportation. The Plan describes what each sector will look like in 2050, and provides detail on the right strategies to achieve the vision. For transportation, the plan emphasizes healthy, active sustainable communities, walkable, bikable communities, and jobs-housing linkages. Also proposes reducing greenhouse gases from freight movement. The plan envisions major reductions in single-occupant vehicle use. By 2050, only 20% of trips in NYC area should be by single-occupant vehicle. The plan also explores how to pay for all the proposed changes and investments while still maintaining existing infrastructure, including a fuel tax, emissions tolling, a freight tax, and other means.

Session 2: Measuring Livability

Andrew Mondschein, Research Associate, New York University

Mr. Mondschein presented some of the challenges associated with measuring livability. One of the major challenges lies in simply constructing a clear definition of livability. In listing the six Livability Principles, he emphasized that the objectives included in one principle could in fact conflict with the objectives of another principles. In addition, he noted the slippery but assumed linkage between sustainability and livability. Another challenge in defining livability is the multiple agencies, Federal, state, and local, as well as non-governmental and community groups, that have constructed their own definitions of livability. In terms of measurement of livability, many choices must be made. Is livability to be measured: in terms of projects or communities, quantitatively or qualitatively, over time or across communities, with or without

a baseline? In the short term, measurement of livability should focus on project performance. Mr. Mondschein cited recommendations on measuring livability from Fabish and Haas that include a focus on decisions, tailoring report to the audience, addressing affordability, and balancing the quantifiable with the objective. In the longer term, there needs to be a reevaluation of what livability means. The diversity of the United States means that the built environment can't be the only measure of livability. Individual outcomes should define livability, contextualized in a sustainability framework. Key issues to address in livability measurement include the role of information and technology, measuring activity patterns, and determining how to deal with tradeoffs among livability principles.

Noam Bramson, Mayor New Rochelle, NY

Mayor Bramson described New Rochelle as a classic "inner ring" suburb. He is tremendously interested in how to set goals for livability and sustainability, and access the resources to accomplish those goals. New Rochelle is undertaking actions to ensure future sustainability, nested in a regional and national framework. Examples of local efforts include transit-oriented development and zoning incentives around the train station. They are trying to improve connectivity to train station, and have received a grant from Federal government to study it. Also, the Long Island Sound shoreline is still largely inaccessible and abandoned, but could be opened up to the public. Regardless, there are few resources available to accomplish their goals. Mayor Bramson understands how difficult it is to come up with saleable standards on a national level, standard that are appropriate to all the different communities that make up the country. Some projects make sense from a narrative perspective, but it make be difficult to quantify their benefits. He believes the goal with measurement should be to maximize the flexibility and discretion of the agencies. He does worry that in the end, the communities that can construct the best "spiel" will be the most successful, whether or not they are most deserving. Also, advantages accrue to communities that can put resources up front. There are many good reasons to focus on livability from a local a regional perspective, but we must guard against optimism about their global impact, because without a national or global framework to deal with climate change, these local efforts won't be enough.

Dorian Dale, Babylon

Improving livability and sustainability really begins with leadership. Even with good leadership, we can still be derailed, though. We need to approach these objectives strategically and "stealthily." Babylon is the first township on Long Island to have Energy Star standards for new construction and to require LEED standards for commercial and industrial construction. Babylon has measured its carbon footprint, which is roughly double per capita that of New York City's. Still, it's not likely that everyone will be moving out of suburbs any time soon. Many developers on Long Island are coming to appreciate the economic arguments for sustainable development. We need to learn how to make those arguments to the wider public.

Paul Krekeler, NYSDOT GreenLITES Program Manager

GreenLITES is “Green Leadership in Transportation and Sustainability.” His supervisor asked why there isn’t a program like the LEED Green Building program for transportation. This program was put together to change the culture at DOT and in the public. “What gets measured gets done.” Therefore, this program rates NYSDOT’s sustainability performance. It recognizes and promotes sustainability best practices. Also, the program helps identify the areas for improvement. Further, the program can be used to identify to public what NYSDOT is doing on sustainability. For each NYSDOT project, GreenLITES creates a project scorecard, and a variety of sustainability best practices can be selected for each project. The goal is to start the sustainability conversation early on in the process of each transportation project. Then, at end of the project, one can see what really happened and assign a score. In that way, it’s much like the LEED program. GreenLITES is about providing options, not telling people what to do. Assigning quantitative measures to sustainability practices allows choices to be made. GreenLITES is a tool for looking at sustainability as a system. Right now, NYSDOT is just using it internally, but they would like to expand to localities as well.

Aaron Ogle, Developer of Walkshed and Software Development Fellow at Code for America

Mr. Ogle presented his efforts over the past year on “walkshed.org,” a tool for online mapping of walkability. To measure livability, you have to know what you’re talking about. To Mr. Ogle, this means being about to do things without having to get in your car. What choices do people have in transportation? Mayor Bloomberg says, “If you can’t measure it, you can’t manage it.” Therefore, walkshed.org uses Geographic Information Systems to bring information and measurement to the built environment. The tool is based on the idea of pedestrian friction – how much resistance will a pedestrian encounter as he or she tries to move through the city? This friction can be interpreted as a measurement of access from any point in a city as a pedestrian. Weighted by friction, walkshed.org counts the various destinations that are accessible as a pedestrian from any address. With this type of information, we can make better decisions, as individuals and communities.