

**Keynote Address by the Honorable Allison Silberberg
“The Need for a Regional Climate Adaptation Roadmap for Northern Virginia”**

**Resiliency Planning for Northern Virginia:
Developing a Climate Adaptation Roadmap
November 14, 2016**

Good morning. I’m delighted to be with you. As the Mayor of the historic City of Alexandria, Virginia, I’d like to extend a warm welcome to distinguished officials and colleagues from FEMA, NVRC, COG, and all levels of government, as well as all of you here today at this important and timely workshop. I would also like to thank NVRC and COG for their foresight in organizing this event and Bob Lazaro, NVRC Acting Executive Director, and his team for hosting it.

It is my honor to address you on what is arguably the most important issue that is profoundly affecting our country and the world as a whole, and that is climate change. Without a doubt, climate change clearly has a significant impact on the economic, environmental, and social aspects of communities around the world. In fact last week, Secretary of State John Kerry went to Antarctica, and there was a major climate change summit in Colorado.

Climate change or global warming, as the name implies, is truly a worldwide issue requiring collaboration and coordination between localities and regions or states and countries. The Paris Climate Agreement is the first significant step in the right direction, and our country, under President Obama’s leadership, has played a critical role in making this happen.

Most significantly, China and the United States, which together produce 38% of the world's greenhouse gas emissions, jointly ratified this agreement in early September. Other significant parties that ratified the agreement include: the European Union, India, Japan, and South Korea. As of October 31st, the Paris Agreement was signed by 197 parties and ratified by 87 parties. I'm happy to report that the agreement finally took effect on November 4th.

Scientific data have shown convincingly that climate change is the direct consequence of human activities that have resulted in ever-increasing greenhouse gas emissions in the atmosphere, which in turn, cause rising global temperatures. Because of this, we've seen more devastating hurricanes, more frequent and longer-lasting droughts, sea level rise, and rapid melting of the Arctic ice. Climate change has created this new reality, and this new reality has resulted in significant economic losses in addition to the loss of life.

According to a 2013 study by the U.S. Department of Commerce on the economic impact of Hurricane Sandy, the New York state government estimated construction costs at \$41.9 billion, while the New Jersey government estimated an additional \$29.5 billion to repair and replace the damage caused by this hurricane. These figures are staggering, sobering, and frightening for any community, and especially for a small, vulnerable community like Alexandria to even contemplate.

The fact is that Alexandria and other jurisdictions located on the shores of the Potomac River have been seeing more than their fair share of flooding events due to torrential rains and hurricanes. With the dire prospect of a sea level rise of four to six feet by the end of this century, adapting to climate change will be key to

Alexandria's future, since our historic district, located along the Potomac waterfront, is a significant economic driving force for my city.

Faced with potentially disastrous consequences resulting from climate change, local governments across our country are taking serious actions to build a more resilient community. We must adapt to this new reality to mitigate the impact of climate change, and future generations will thank us for taking action.

We are beginning to see more state and local governments actively plan and implement approaches to stem the tide of climate change. We must get ready. It is imperative. Oftentimes, these efforts tend to be *ad hoc* and based on perceived priorities. For example, one jurisdiction may be focusing on how to adapt to sea level rise while a nearby jurisdiction is focused on drought. In other words, we must band together so that we are stronger together as we face the challenges of climate change.

Despite our relatively limited resources, Alexandria has had a long history of being an environmentally focused city. In 2008, the City established an Eco-City Charter, which laid out a vision for an environmentally sustainable community, and adopted an Environmental Action Plan and Energy and Climate Change Action Plan. Using these plans as a roadmap, Alexandria has implemented several actions aimed at reducing greenhouse gas emissions in areas such as transportation, green building and infrastructure, solid waste management, air and water quality, energy and open space.

Here are a few specific things we have done or are doing in Alexandria:

To help adapt to climate change, Alexandria is undertaking Clean Waterways projects to improve the city’s stormwater and sanitary sewer infrastructure, including the installation of green infrastructure aimed at improving water quality. The City is committed to these efforts and already plans to invest up to \$300 million in these areas over the next 10 to 20 years.

Alexandria adopted COG’s voluntary greenhouse gas emission reduction targets in 2009. As part of its new 2017-2022 strategic plan, the City is working to reduce per capita greenhouse gas emissions by 25 percent from 2012 levels.

In 2012, the City of Alexandria permanently shut down a local, antiquated 485-megawatt coal-fired power plant that used to be the single largest pollution source in the region and had the capacity to emit 4 million metric tons of greenhouse gas a year. Four million metric tons of greenhouse gas a year was more than twice the amount currently emitted by the entire city. Replacing its generation capacity with power plants using renewable or clean energy, such as natural gas, has resulted in significant reduction in greenhouse gas emissions. And we are committed to doing even better.

Transportation accounts for 26 percent of Alexandria’s total community emissions. In 2008, the City adopted a Transportation Master Plan that encourages the use of alternative modes of transportation, reducing dependence on the private automobile, helping people gain mobility around the City, and leading to the establishment of transit-oriented, pedestrian-friendly village centers.

Several transportation initiatives have been implemented or are being pursued, including the Capital Bikeshare program, hybrid bus fleet modernization, and a

regional first: Metroway, which is a dedicated right-of-way premium bus service operating between Potomac Yard and Crystal City. In addition, our new Potomac Yard Metrorail Station won federal environmental approval this month, and we expect construction to begin in the next 18 months.

The City's solid waste recycling rate has gone from 27 percent in 2007 to the current level of 48 percent, a significant increase of 78 percent. In partnership with Arlington County, the City has a waste-to-energy facility that combusts our two jurisdictions' municipal waste and co-produces 22 megawatts of electricity. That's enough to power 17,000 average-size homes.

In 2012, Alexandria achieved its goal of having 100 acres of open space. I believe we can do even better and must continue to add more open space wherever possible.

The City has a strong, demonstrable commitment to constructing and operating green and high-performance public buildings. We have constructed seven new public buildings over the last 10 years, all of which achieve U.S. Green Building Council LEED Gold or Silver certifications. These new buildings include public schools, fire stations, a recreation center, a transportation center, and the Alexandria Police Department headquarters.

We have also had a successful green building policy since 2009 for multi-family and commercial buildings that to date has resulted in more than 90 percent of new development square footage conforming to LEED certified or LEED Silver standard.

The City operates robust emergency response operations, including command and operations centers to respond to community needs during events like hurricanes and snow storms. Moreover, the City operates various emergency power systems infrastructure to support emergency response operations and various community sheltering needs in the event of prolonged utility outages.

Finally, as part of its Waterfront Plan, the City is embarking on a flood mitigation project in Old Town and conducting routine flood channel maintenance. The City has been receiving Community Rating System credits that help residents lower their flood insurance costs.

All of these efforts create change for the better. It is not only in our best interest to do so, but it is also incumbent upon us to keep moving forward. It's our responsibility. Future generations will thank us.

I applaud Resilient Communities for America for its “Resilient Communities for America Agreement” campaign that commits local governments to building more resilient communities. More than 200 mayors and local elected officials have signed this agreement, and Alexandria is a proud signatory, and is proud to stand alongside our neighboring jurisdictions for this important cause.

I would also like to mention President Obama’s State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience, which was established by Executive Order in November 2013.

Out of the seven recommendations, the Task Force’s number 1 recommendation to President Obama stated that climate change would have an impact upon

communities for years to come. By incorporating climate change considerations into its programs, the federal government can support communities as the cities rethink traditional approaches to land use, building and infrastructure siting and design, and community planning.

I wholeheartedly agree with the Task Force’s recommendations. I believe that the federal government should take a strong leadership role in tackling global warming by designing federal programs that promote and encourage climate change adaptation actions at the local level.

Furthermore, I also believe the most effective way to respond to climate change is for local governments to work cooperatively with neighboring jurisdictions on regional approaches. These approaches would encompass critical areas such as sustainable land use, transportation, water and stormwater, and energy.

In the Metropolitan Washington region, we are fortunate to have set up such effective mechanisms for promoting regional approaches and cooperation under the auspices of COG and NVRC.

Several programs and initiatives from these two regional organizations are working on climate change. Most recently, the COG Multi-Sector Working Group has been studying and preparing recommendations on how to further reduce the region’s greenhouse gas emissions.

NVRC successfully launched SolarizeNoVA – a program to make it easier and more affordable for residents to install solar power systems on their homes. In 2015, our

local SolarizeAlexandria campaign resulted in a 70-kilowatt increase in the amount of solar power capacity installed in the city.

SolarizeNoVA has supported deployment of more than 85 new systems in localities such as Alexandria, Dumfries, and Leesburg, with a construction value of over \$2.29 million. In August 2016, NVRC also launched the Northern Virginia Solar Map, an online tool that describes the solar energy potential of specific buildings and homes -- the first mapping program of its kind in Virginia.

Here is the bottom line: we must have a sustainable, robust and resilient transportation system in the metropolitan Washington region. We also must have uninterrupted energy and power supply. We must continue to reduce our greenhouse gas emissions and increase our recycling efforts. Last, but not least, we need to have an integrated infrastructure that protects residents and properties in case of major climate events.

To work toward achieving these goals, I advocate that all jurisdictions within the Metropolitan Washington area develop a collaborative framework under the auspices of NVRC and COG. Our city is a member of both these regional planning organizations, and we look forward to working together to develop such a framework.

As President Obama stated in 2014, “There is one issue that will define the contours of this century more dramatically than any other, and that is the urgent and growing threat of a changing climate.”

This is our time to stand up together and focus on what is possible. We should look beyond what is required by law and do what we know is right. These are complicated decisions, but it is our responsibility to meet these challenges head on. Not to do something is not an option. Staff from the City of Alexandria and I will be pleased to answer any questions you may have. Thank you very much.

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