



ADMINISTRATOR'S
COLUMN



Collister
Johnson, Jr.

*A Fundamental Problem
for the SLSDC*

When I was sworn in as Administrator in late October 2006, the U.S. Seaway's budget for Fiscal Year 2008 had already been completed and approved by the Secretary of the Department of Transportation, and the Office of Management and Budget (OMB). It was not until some months later, when we started preparing for the 2009 budget that I focused on the Capital and Operations and Maintenance (O&M) funding mechanisms for the Seaway. In that process, I discovered

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Commodities Outlook for 2007

Project cargoes in the Great Lakes Seaway System are ramping up for what promises to be years of steady growth. There's no doubt that two in particular — wind turbines and pipes — are about to become substantially more visible than ever before.

Buffalo is hoping to add to its success from last October when it received a shipload of 24 wind turbine blades from Brazil's largest port, Santos. The 153-foot long wind turbine blades moved through the Seaway and were unloaded at the Buffalo port and trucked to the nearby Steel Winds Wind Farm at Tonawanda in Erie County, New York. The last of the wind turbines were erected on the old brownfield Bethlehem Steel site earlier this spring.

Thunder Bay, Ontario, will receive at least one ship from Germany in 2007 loaded with wind turbine components for the Chin Chute Wind Power Project in Taber, Alberta. The \$60 million, 30 megawatt project provides power for 14,000 homes in the province while eliminating 88,000 tons of carbon dioxide.



Other wind projects are also in the works. Federal Marine Terminals-Milwaukee confirmed the arrival of eight vessels later this summer carrying wind turbine components destined for the region's wind farms. The terminal is also bidding on the nearby Blue Sky Green Field \$300 million project set to start this spring which calls for 88 wind turbines to be shipped through the Seaway from the Danish company Vestas Wind Systems. In New York the ports of Oswego and Ogdensburg are eyeing developments in Jefferson County, where the Cape Vincent and St. Lawrence Wind Farms are undergoing local and state environmental reviews. A third project only miles away, dubbed Horse Creek Wind Farm, is just beginning a draft environmental impact study.

Meanwhile, nearby Wolfe Island will be the site of a \$410 million Canadian mega project set to get underway in June 2008. The German company Siemens will ship 86 wind turbines and ancillary parts through the Seaway. The Norwegian firm of Nexans will ship a 4-mile long transmission cable that will transfer wind energy from the island's turbines

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U.S. Department of Transportation • Saint Lawrence Seaway Development Corporation

Seaway Compass



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a fundamental flaw in the Seaway funding model, a flaw which our Canadian partners suffered from for many years, but which they fixed in the mid-1990s. This flaw is still plaguing the U.S. Seaway. Unless remedied, it could result in dire consequences — both for our System and our employees.

Like bridges, tunnels, pipelines, subways and similar infrastructure, the Seaway is what is known in finance circles as a “perpetual asset.” That is, when the assets that make up the Seaway reach the end of their useful life, they are not discarded. Rather, during the course of their useful life, the assets are renewed through periodic capital investment, so that at the end, they have been rehabilitated and rebuilt. Their cycle of life can then begin all over again.

The useful life of the Seaway's locks and related equipment is approximately 50 years. Having been installed in 1959, our infrastructure is almost 50 years old and indeed nearing the end of its useful life. What one would expect to see over the course of the last 50 years is recurring spikes of capital investment in the Seaway to assure its status as a perpetual asset. What I found, however, to my amazement and even shock, is that throughout its entire history *the U.S. Seaway has never had a Capital account independent of its O&M expenses.* That is, the Seaway has never received the capital required to adequately renew its infrastructure assets.

To address the problem of inadequate capital investment, in the 1990s the Canadian Government instituted some major reforms for the St. Lawrence Seaway Management Corporation (SLSMC). It created a Board of Directors to oversee management of the Corporation. More importantly, it formalized the Corporation's funding model. Under that model, tolls received by the Corporation would be used by the Corporation to fund O&M expenses and some capital costs but the majority of capital costs would be paid by the Government of Canada annually

from their general fund, based on rolling 5-year capital plans negotiated with the Corporation.

Officials at the Corporation anticipate that this year, toll revenue will be approximately CD 60 million while the capital contribution from government will reach approximately CD 50M, a ratio of capital to O&M expense of almost one to one. By contrast, last year the Saint Lawrence Seaway Development Corporation's “capital” budget was \$800,000 and O&M was approximately \$17M, a ratio of capital to O&M expense of one to twenty. In short, the Canadian model assures renewal of their locks as a perpetual asset. The U.S. model does not.

It is a known and self-evident fact that it is simply not possible to safely maintain the Seaway in the future through O&M expenses alone and without a robust capital account. As proof, one needs only to look at the Canadian experience with the locks at the Welland Canal, which were completed in 1932 in order to provide ship passage around Niagara Falls. From the beginning, the Welland Canal received funding only from tolls — in other words, only enough to pay for O&M expenses. There was no capital account and therefore no spikes of capital investment in the System. Like clockwork, fifty years later — at the end of its useful life — one of the locks suffered a catastrophic failure, collapsing onto a ship, shutting down Great Lakes shipping for over a month, and triggering a host of lawsuits and political repercussions.

If we at the U.S. Seaway are to avoid a similar fate, we must solve the problem of years of minimal investment and a non-existent capital account. We owe this to our President, to the American public, to the Department of Transportation, to our customers and stakeholders, and most importantly, to our employees.

The funding model we have now is both unsustainable for our infrastructure and unsafe for our employees and customers. That is why we are working hard to resolve the problem.

Commodities Outlook for 2007,*continued from page 1*

under water to Canada's mainland for integration into the power grid.

Another major project expected to get underway in 2008 is the \$200 million Port Alma Wind Project south of Chatham on Lake Erie. Kruger Energy is undergoing environmental review of its 101 mw project that will require 44 wind turbines to power up to 25,000 homes.

The second major project cargo in the Great Lakes Seaway System that promises to become increasingly visible in 2007 is commercial grade steel pipes. Hundreds of miles of pipe varying from 18" to 48" in diameter will be needed to move gas, crude and synthetic oil and diluents (light oil) to a growing energy market. The current flow of 1 million barrels per day from Canada's oil sands region of Alberta is set to increase to 2.6 million barrels per day (bpd) by 2015.

With the world's largest known potential petroleum reserves, Alberta has become a magnet for energy investment. More than a hundred billion dollars are expected to be spent on exploration, production, and infrastructure improvements. Mining, refining, and pipeline activities in Alberta are enjoying boom times, and skilled labor worldwide is eagerly 'Alberta bound.'

Crude oil starts as oil sand. Two tons of sand yield a barrel of tar-like bitumen which is then upgraded into synthetic crude by diluents so the product can be pumped in pipelines for delivery to refineries. From there emerge the final products sold to consumers and businesses, such as gasoline, diesel, kerosene and JP-4.

All that good news does have challenges. A generation ago 350 North America refineries could help speed delivery to thirsty markets, but fewer than 150 are currently in operation. New refineries means increased demand for new pipelines.

With crude oil production expected to triple in the next decade, new pipeline projects are emerging in many markets. The larger the project the more likely that marine transport is explored by project managers as a viable transportation option. Waterborne efficiency in moving oversized cargo has long been recognized by project planners, and Highway H₂O connects foreign markets inland more than 2,300 miles to ports like Duluth-Superior and Thunder Bay. Both ports offer excellent rail service and intermodal yards essential for unloading pipes from ships.

Enbridge, the Canadian oil pipeline giant, has a project bearing close watching for all stakeholders in the Great Lakes Saint Lawrence Seaway System. Called the Alberta Clipper, the \$2 billion undertaking calls for new

36" diameter pipe carrying crude oil running 1,000 mile from Hardisty, Alberta, to Superior, Wisconsin. The pipeline will move 450,000 barrels per day (bpd) that will in a short time increase to 800,000 bpd. At Superior, the new line will connect with the main pipeline running to Chicago. Given the amount of pipe required and the importance of keeping skilled crews on schedule, the likelihood is strong that this imported pipe could arrive through the Seaway.

Enbridge is also undertaking a project called Southern Lights, which will move 180,000 bpd of diluent. Hundreds of miles of 16"-, 20"- and 24" pipe will be installed along the way from Chicago to Edmonton. The opening stage of the \$1.3 billion project has already begun and is anticipated to be completed by the summer of 2010.

Three Great Lakes states pipeline companies — Precision Pipeline, LLC of Eau Claire, Wisconsin; Michels Corporation of Brownsville, Wisconsin; and Welded Construction, L.P. of Perrysburg, Ohio — are part of a four company partnership of contractors called Global Pipeline Partners LLC that is working with Enbridge on Southern Lights. This partnership will be an entity marine industry personnel are likely to be contacting frequently as energy infrastructure investments continue to grow throughout the region.

Significant growth in gas consumption has prompted construction of the \$3 billion Rockies Express (REX) pipeline that will move 1.8 billion cubic feet per day. Stretching more than 1,300 miles from Cheyenne, Wyoming to Clarington, Ohio, the owners were required to contract for pipe from as far away as Germany to meet tight construction schedules. The port of Toledo received two of these pipe shipments last year carried by CANFORNAV ships that originated in Bremen, Germany. Toledo expects 10 more shipments of the specialized pipe over the next two years.

In summary, wind turbines and gas-petroleum infrastructure products should provide strong growth for the Seaway this year.



The above pipeline was discharged at Midwest Terminals of Toledo International, Inc. It was manufactured in Germany and shipped from the BLG Logistics terminal in Bremen. The specialized pipeline will be used in the REX project.

GUEST COLUMNIST

Richard D. Stewart, Ph.D., Co-Director Great Lake Maritime Research Institute



The Marine Link in Freight Corridors

The Federal Highway Administration has forecast that by 2020 a number of highways immediately around the Great Lakes region will be at or near capacity and the freight market is expected to continue to grow. Heavily loaded trucks can cause significant damage to highways and current highway funding at the state and federal level is insufficient to keep up with needed repairs. Trucks are limited to an 80,000 pound (40 short tons) gross vehicle weight on most of the interstate highway system and this weight limit is not expected to increase in interstate transportation. In an effort to address this issue some Great Lakes state Departments of Transportation are considering designating freight corridors. Over a number of years as repairs and rebuilding occur these select highways would be reinforced for heavier trucks. The concept links industry clusters and transportation nodes with the freight corridors.

One of the advantages of marine transportation is its ability to carry heavy cargoes. On some routes marine transportation may provide a viable linkage for freight corridors. Ideally our transportation system would take advantage of each mode's attributes. Industries that produce or consume dense or oversize non-bulk commodities could be clustered near freight corridors that have specially designed highways that overweight trucks can move on bringing the cargo to the marine port for seamless rapid intermodal transfer. The vessel would then link to the next freight corridor. The marine link could move these cargoes between business clusters,



SECU between single and double stacked ISO containers

becoming an extension of the freight corridor system. Properly designed a freight corridor system could move steel slabs from plants in the Iron Range of northern Minnesota to the Twin Ports by high limit roads or rail, then by vessel to a lower lake port and by rail or truck along another freight corridor to the rolling mill. On every leg of the journey each individual cargo unit would be exceeding the interstate highway gross vehicle weight limit. This system would allow economics of scale, reduce energy consumption, lower freight costs, and limit highway damage.

An example of this robust intermodal supply chain is being introduced in the Baltic region of northern Europe by a number governments and companies such as the paper industry. Stora Enso, a leading international paper company, has introduced in Europe Stora Enso Cargo Units, (SECU) that resemble oversize intermodal cargo containers. Stora Enso's supply chain loads oversize and overweight paper reels into SECUs right at the mills, and sends them by rail or truck to ports on freight corridors where they are loaded onto a vessel for the journey to the next industry cluster. The SECUs have Radio Frequency Identification (RFID) data tags for automatic identification and information tracking. Each SECU is 13.8 meters long by 3.6 meters wide and can hold approximately 90 metric tons of cargo. Additional information on the Baltic Supply Chain concept and Stora Enso's innovative SECUs and Baseport project can be found at: http://www.inloc.info/internal/wp1/10_case_study_technical_and_logistic_aspects301205.pdf and <http://www.rne.at/media/Presentations/06%20-%20Stora%20Enso%20Clason.pdf>

The Finish Aker Yard's Ruma shipyard is building three ice-strengthened Roll On Roll Off (RORO) ships which are specifically designed for carrying the SECUs as well as containers. The first vessel M/V TransPaper was launched in June of 2006. Existing vessels such as the Swedish RORO Tor Selandia are also used to carry SECUs.

Not only could the SECUs be utilized for paper movements on the Great Lakes, but for other dense cargoes as well that lend themselves to freight corridor movements. Examples of existing and emerging markets include metals, bottled water, agricultural products, and canned goods. In addition to SECUS, the vessels could also handle international (ISO) containers loaded to weight limits that are acceptable for vessels or rails cars but not trucks. With limited resources for road repair, the high cost in building new highways or railways and the ability to reduce the energy consumption it makes sense to take advantage of each mode's attributes.

New Members Join HWY H₂O Initiative

The St. Lawrence Seaway's Highway H₂O marketing campaign continues to add new members. The membership drive continues to be a success, just recently adding 15 new members, bringing the total membership to 34. We have recently reached out and added stevedoring companies, ship operators, tugboat operators, ship agents and trucking operations as part of the Highway H₂O initiative.

Highway H₂O will launch a quarterly newsletter in early spring to bring members closer together and update them on activities.

Contact Jennie Richardson at the St. Lawrence Seaway Management Corporation, (905) 641-1932 or email her at: jricharson@seaway.ca, if you would like membership information.

Port Partners and Members:

HWY H₂O Port Partners

Cleveland-Cuyahoga County Port Authority
 Detroit/Wayne County Port Authority
 Duluth Seaway Port Authority
 Hamilton Port Authority
 Montreal Port Authority
 Oshawa Port Authority
 Ports of Indiana Burns Harbor/Portage
 Port of Milwaukee
 Port of Oswego Authority
 Port of Prescott
 Quebec Port Authority
 The Illinois International Port District
 Thunder Bay Port Authority
 Toledo-Lucas County Port Authority
 Toronto Port Authority
 Trois-Rivieres Port Authority
 Valleyfield Harbour Corporation Valport Maritime Services, Inc.
 Windsor Port Authority

HWY H₂O Members

City of Hamilton, Economic Development
 City of Superior
 Gaelic Tugboat Company
 Great Lakes Feeder Lines Inc.
 KO Transport Inc.
 Liebherr-Canada Ltd.
 McKeil Marine
 Midwest Terminals of Toledo International
 Pennsylvania Department of Community & Economic Development
 Purvis Marine Limited
 Quebec Stevedoring, Limited
 Trac-World Freight Services, Inc.
 Upper Lakes Group Inc.
 World Shipping, Inc.

HWY H₂O Alliances

The Seaports of Niedersachsen
 Shanghai Port Authority
 Chinese Ministry of Communications Water Transport Division



Robert J. Lewis Pacesetter Award Winners

The Saint Lawrence Seaway Development Corporation Administrator Terry Johnson, Jr. is pleased to announce that eight U.S. Great Lakes St. Lawrence Seaway ports and four terminals have earned the Corporation's annual Robert J. Lewis Pacesetter Award for the 2006 navigation season.

This award is presented to the U.S. ports and terminals whose management, marketing, and operational excellence have resulted in an increase in international tonnage shipped through the Seaway when compared to the previous navigation season.

And the winners are:

Cleveland-Cuyahoga County Port Authority
 Detroit/Wayne County Port Authority
 The Illinois International Port District
 Port of Indiana — Burns Harbor
 Port of Buffalo Gateway Metro Terminal
 Port of Milwaukee
 Port of Oswego Authority
 Toledo-Lucas County Port Authority

Federal Marine Terminals — Burns Harbor
 Federal Marine Terminals — Cleveland
 Hallett Dock Company — Duluth
 Nicholson Terminal and Dock Company — Detroit

The Port of Milwaukee is Recognized for 99 Percent Increase in International Tonnage



Left to right — Eric Reinelt, Port Director, Port of Milwaukee; Dan Steininger, President of the Port of Milwaukee Board of Harbor Commissioners; Collister (Terry) Johnson, Jr., Administrator, Saint Lawrence Seaway Development Corporation; Scott Walker, Milwaukee County Executive and member of the St. Lawrence Seaway Advisory Board.

Hallett Dock Terminal Posts Robust Increase in Seaway Shipments in 2006



Left to right — Collister (Terry) Johnson, Jr., Administrator, Saint Lawrence Seaway Development Corporation presents the Robert J. Lewis Pacesetter Award to Mike McCoshen, General Manager, Hallett Dock Company.

Seaway and Great Lakes Leaders Attend Premier Convention to Attract Cruise Ships to the System

On March 12th, members of the Saint Lawrence Seaway Development Corporation (SLSDC), The St. Lawrence Seaway Management Corporation (SLSMC), and members of the Great Lakes Cruise Coalition (GLCC) attended the annual Seatrade Cruise Shipping Convention held in Miami, Florida.

The convention is one of the cruise ship industry's largest trade show and allowed the Seaway delegation to meet with over 1,000 industry executives. More than 100 countries and regions were represented. The Great Lakes Seaway delegation exhibited at the Convention to promote increased ship voyages in the waterway.



Left to right — Mike Riehl, Toronto Port Authority, Jennie Richardson, SLSMC, Steve Olinek, Detroit/Wayne County Port Authority, Lisa Marciniak, Duluth Seaway Port Authority, Steven Burnett, GLCC, Nichole Eller, Erie-Western Pennsylvania Port Authority, and Tom Rausch, SLSDC.

Upcoming Trade Mission Plans



Plans for the upcoming Trade Mission to Rio de Janeiro and Sao Paulo, Brazil are well underway with the dates set for October 12–20, 2007. The Saint Lawrence Seaway

Development Corporation and the St. Lawrence Seaway Management Corporation are excited to host their third visit to Brazil. Prior missions occurred in 1991 and 1995.

This Trade Mission will offer a unique opportunity to explore new business and develop our position as a gateway to North America's heartland. Brazil's role as the world's largest supplier of iron ore, steel slabs, pig iron, steel coils, and sugar, suggest that it will be a growing trading partner for the United States and Canada for some time. Brazil currently ranks third for overall Great Lakes Seaway System tonnage, accounting for approximately one million tons of cargo annually. The Trade Mission will also provide significant opportunities to explore the trading potential for new cargoes, such as fuel-based alcohols like methanol and ethanol.

If you are interested in joining the delegation, please contact Rebecca McGill, Director of Trade Development and Public Affairs, at (202) 366-0091 or email her at: rebecca.mcgill@sls.dot.gov.

SLSDC Moves Office Location

The U.S. Department of Transportation Headquarters Facility is moving this spring. Our new location/ mailing address as of May 14th will be:

Saint Lawrence Seaway Development Corporation
U.S. Department of Transportation
1200 New Jersey Avenue, S.E., Suite W32-300
Washington, DC 20590

Our phone number will remain the same.
1-800-785-2779 or (202) 366-0091.



Looking for Ballast Water Information? Click on our website.

The Saint Lawrence Seaway Development Corporation (SLSDC) has developed a new ballast water section on the binational Seaway website: www.greatlakes-seaway.com. Both Seaway Corporations will regularly update the site to keep citizens informed about government, industry and academic organizations pursuing ballast water research designed to control the spread of exotics in North America's premier waterway.

The website's section begins with an introduction to the complex nature of the problem and recounts the actions that the Seaway Corporations have taken to reduce the level of introductions via ocean-going vessels trading in the System. The U.S. Coast Guard is the federal entity responsible for developing an enforceable, scientifically defensible ballast water standard, and the Seaway Corporations work closely with the Coast Guard, Transport Canada, and a host of other federal and marine industry groups to develop effective and practical solutions to stemming the spread of invasives.

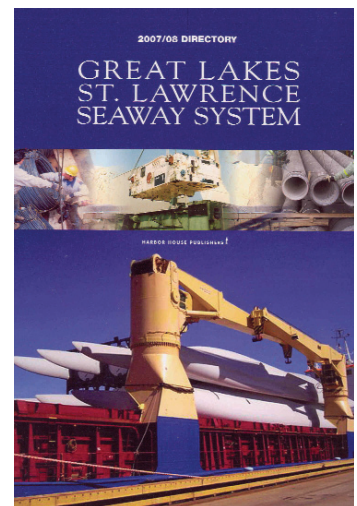
The Great Lakes St. Lawrence Seaway System Directory Now Available

The Saint Lawrence Seaway Development Corporation (SLSDC) is happy to announce that the 2007/08 edition of *The Great Lakes St. Lawrence Seaway System Directory* is now available.

This excellent guide to the Great Lakes Seaway System has 56 full-color pages of information and feature stories about the ports, services, and commodities on Highway H₂O, together with a directory of port authorities, brokers, agents, carriers and organizations serving the

System. Surely you will agree that this directory is a comprehensive source of information for new and old users of the waterway, and a first-rate promotional tool.

If you would like a copy at no charge, please contact Joy Pasquariello, Public Affairs Specialist, at the SLSDC, (202) 366-0091.



Ethanol Industry Growing in the Great Lakes St. Lawrence Seaway Region

Interest in ethanol has grown in direct relationship to the steep rise in gas prices in recent years. Whether the issue is state and federal mandates to achieve increased use of ethanol or tax breaks for farmers growing corn destined for ethanol production, opinions vary widely. One thing is certain, its availability is growing monthly.

What is ethanol? Basically, it's fuel made from sugars found in plants. In Canada and the United States, the most common plant for making ethanol currently is corn. Brazil is currently the world's leading user and exporter of this 'hot' fuel. President Bush's



recent visit to a Brazilian ethanol plant supplied by sugar cane indicates White House interest in reducing petroleum dependence and greenhouse gas emissions.

Around the nation hundreds of potential start up production facilities have been talked about. One facility in the Great Lakes Seaway System that everyone should be aware of is Northeast Biofuels (NEB). NEB is building a \$200 million ethanol plant in the Town of Volney, N.Y., in Oswego County. It is converting the former Miller brewing plant into an alternate fuels based factory that will turn 40 million bushels of corn into 114 million gallons of ethanol annually.

Construction has been underway for months employing 450 local workers. Startup is slated for this fall according to Permolex officials, the majority owners. The corn is expected to move by rail and truck. Will corn move by water into the port? For now, that looks unlikely, but check back in a year. Many experts say as long as the price of oil exceeds \$50 a barrel — which it has for several years — the profit margin makes more ethanol production a certainty.

Seaway Personnel Changes



Adam Wasserman

Adam Wasserman — The Cleveland-Cuyahoga County Port Authority Board of Directors has selected Adam Wasserman to be the port's President and Chief Executive Officer. Mr. Wasserman has more than 20 years of experience in economic development, including working with ports on development projects.

Mr. Wasserman succeeds Gary Failor, who retired late last year after leading the port authority for 12 years. Board Chairman John Carney said that in addition to strengthening the port authority's maritime and development finance activities to retain and grow area business, Mr. Wasserman's priorities will include facilitating completion of the trans-Erie ferry service, and the relocation of port operations to allow for lakefront redevelopment.

Stuart H. Theis — The United States Great Lakes Shipping Association announced the appointment of Stuart H. Theis as Executive Director.

Mr. Theis, an attorney and business leader in the U.S. and Canadian Great Lakes — St. Lawrence Seaway industry for many years, previously served in a variety of executive capacities with Cleveland based M.A. Hanna Company and Oglebay Norton Company. While at Oglebay, Theis was President of the company's Marine Services Operations, consisting of a fleet of 12 dry bulk carriers and dock facilities serving the Great Lakes.



Stuart H. Theis

Stephen Mosher — Stephen Mosher, Port Director, Port of Indiana — Burns Harbor/Portage, recently announced that he is taking a new job as the General Manager of North America Stevedoring Company. As of press time a replacement has not been named.

Upcoming Events

May

May 10

National Marine Day
Ottawa, ON

Contact: sbrooks@cmc-ccm.com; (613) 233-8779

May 13–19

National Transportation Week
www.ntweek.org

May 14–16

Great Lakes Commission Semiannual Meeting
Indianapolis, IN
www.glc.org

May 28–June 1

Great Lakes Fishery Commission Annual Meeting
Sault Ste. Marie, Ontario
www.glfsc.org

May 30–June 1

Mari-Tech 2007 Conference & Trade Show
Niagara Falls, ON
Contact: John Moriarty, (705) 730-9668,
jmoriarty@sympatico.ca

June

June 6–8

International Joint Commission Great Lakes
Water Quality Conference
Chicago, IL
www.ijc.org

June 15–17

Great Lakes United Annual Meeting
Toronto, Ontario
www.glu.org

July

July 11–13

Great Lakes & St. Lawrence Cities Initiative Annual Meeting
Grand Rapids, MI
www.glslicities.org