

Line 3 Replacement Project Summary



"Our role comes with tremendous responsibility.
That's why safety and operational reliability is our number 1 priority."

Al Monaco, President and CEO



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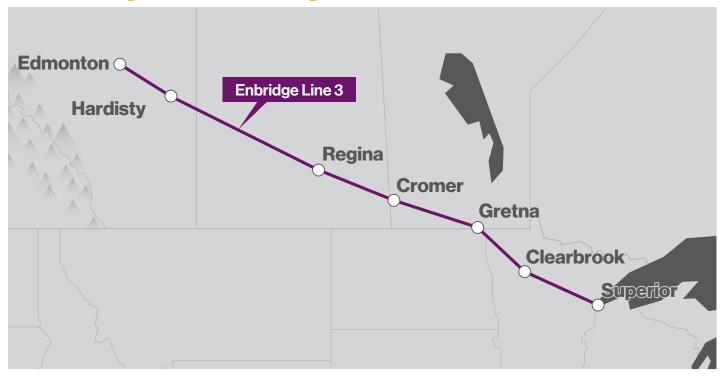
About Enbridge



- We transport energy; operating the world's longest, most sophisticated liquid petroleum transportation system.
- We have provided safe and reliable energy transportation in North America for more than 65 years.
- We deliver more than 2 million barrels of crude oil daily.
- We continue to invest billions of dollars to enhance Enbridge's ability to

- transport supplies of crude oil to North American refineries, helping support North American energy independence.
- Our corporate headquarters are in Calgary, Alberta and Houston, Texas with offices in Superior, Wisconsin; Duluth and Edina, Minnesota; Griffith, Indiana; Minot, North Dakota; and Cushing, Oklahoma, along with regional offices along the system route.
- We employ 11,000 people, of which 6,500 are employed in the U.S.

Line 3 Pipeline History



Line 3 was constructed in the 1960s and put into service in 1968. The existing Line 3 is a 34-inch diameter, 1,097 mile long pipeline, which extends from Alberta, Canada to Superior, Wisconsin. Line 3 has transported a variety of crude oil based on shipper demand. Minnesota relies on the extensive Enbridge Mainline System pipeline network to provide crude oil to its two large refineries located in and around Minneapolis and St. Paul.

Since it began operating in the late 1960s, the annual average capacity of Line 3 has varied between a low of 390,000 barrels per day (bpd), which is the current operating capacity of the line, and a much higher capacity, in the range of 760,000 bpd.

Historically, Line 3 has played and continues to play an important and integral role in delivering crude oil to Minnesota, Wisconsin, and other North American refineries.





Line 3 Serves as a Vital Energy Link

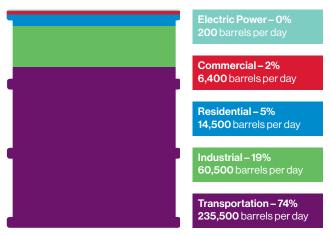
Our goal is to invest wisely in infrastructure to support the needs of shipping and refining customers so they can in turn meet North Americans' needs for fuels, asphalt and the raw materials used to make fertilizers, solvents, plastic materials, and other products we all use every day.

U.S. demand for Canadian crude oil transported on the Enbridge Mainline System has increased significantly in recent decades. As a result, demand for capacity to ship crude oil on the Enbridge Mainline System continues to exceed available pipeline capacity, even after Enbridge's recent projects have improved efficiency and added capacity to transport additional oil. For example, in the first few months of 2015, Minnesota refineries' demand exceeded supply by 5.5 percent for light Canadian crude and 35 percent for heavy Canadian crude. A viable, reliable pipeline network must exist to satisfy the refiners' demand for Western Canadian supply.

In 2014. Enbridge transported over 74 percent of

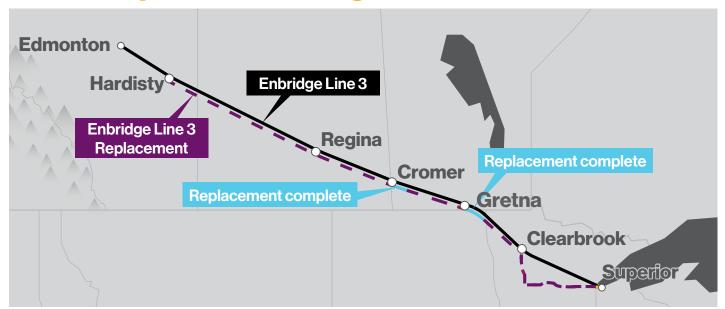
In 2014, Enbridge transported over 74 percent of the crude oil imported from Canada and consumed in the Midwest, in states including North Dakota, South Dakota, Nebraska, Missouri, Minnesota, Iowa, Oklahoma, Kansas, Illinois, Tennessee, Wisconsin, Michigan, Ohio, Indiana, and Kentucky. Minnesota refineries including Flint Hills and Northern Tier St. Paul rely on Canadian crude oil. The Enbridge Mainline System has been serving the needs of Minnesota refineries for decades. Line 3 is a vital component of this System. The Line 3 Replacement Project will help ensure that Enbridge continues to meet the needs of our shippers, regional refineries, and beyond.

2012 Minnesota Petroleum Consumption by Customer Sector*



*U.S. Energy Information Administration

Line 3 Replacement Program



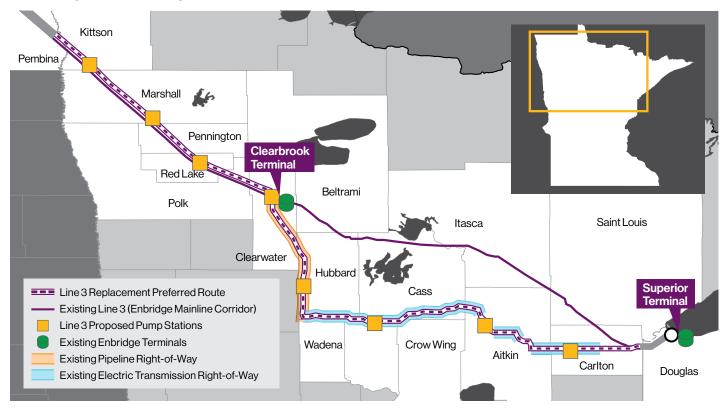
Enbridge Energy, Limited Partnership's ("Enbridge") maintenance driven Line 3 replacement will reduce future repair activities and resulting disruptions to landowners and the environment, as well as restore the historical operating capabilities of Line 3, and promote energy efficiency of Enbridge's Mainline System. A new 36-inch diameter pipeline will replace the existing 34-inch diameter pipeline along most of the Line 3 route.

This is an integrity and maintenance driven Program.

The Program's Background:

- Line 3 is a 1,097-mile crude oil pipeline extending from Edmonton, Alberta to Superior, Wisconsin, and is an integral part of Enbridge's Mainline System. Line 3 was installed in the 1960s.
- Line 3 Replacement Program consists of 1,031 miles of 36-inch diameter pipeline that begins in Hardisty, Alberta and ends in Superior, Wisconsin.
- The U.S. portion includes about 13 miles in North Dakota, 337 miles in Minnesota, and 14 miles in Wisconsin.
- The Program is an approximate \$7.5 billion private investment (\$2.6 billion for the U.S. portion), making it one of North America's largest infrastructure programs, which supports North American energy independence.

Line 3 Replacement Project



The U.S. portion of the Program Enbridge is proposing, is referred to as the Line 3 Replacement "Project."

Project Description in Minnesota

- 337 miles of 36-inch diameter pipeline in Minnesota to replace existing 282 miles of 34-inch diameter pipeline.
- Construction of eight pump stations.
- Includes 27 strategically placed valves.
- Restore historical operating capabilities and move 760,000 barrels per day (bpd).
- Enable Enbridge to better respond to variable refinery needs, now and in the future, as well as unplanned disturbances to North American crude oil network.
- Reduce power requirements on a per barrel basis.
- Minimize the impact of planned maintenance on the Enbridge Mainline System to shippers and refiners.

- \$2.1 billion investment for the Minnesota portion of the design, permit and construction of Line 3.
- In Minnesota, the replacement pipeline will follow existing utility corridors for more than 98 percent of the route west of Clearbrook and 75 percent east of Clearbrook.
- Project applications are being reviewed by the Minnesota Public Utilities Commission (MPUC), and upon receipt of all applicable regulatory approvals, construction can begin.

Anticipated Project Timeline in Minnesota (pending regulatory approval)

2016	Construction begins
Late 2017	The replacement pipeline is placed into service in late fall or winter
2018	The existing pipeline is taken out of service and restoration of land disturbed during construction continues

Petroleum Transportation

Line 3 Replacement pipeline = 760,000 bpd. This is the equivalent of more than:



10,000 rail cars per day



24,000 tanker trucks per day

Project Benefits

Jobs: Create thousands of family-sustaining construction jobs, and provide new business opportunities for contractors for design, survey, environmental assessment, and project planning.

Economic Activity: Significant boost to the U.S. economy during design and construction; local and regional economic boost during construction from the purchase of local products/materials and use of local hotels, restaurants and services.

Long-term Property Tax Revenues: Enbridge paid more than \$34 million in Minnesota property taxes in 2011; this will increase incrementally by \$19.5 million beginning the first full year of service.

Support for Minnesota Refineries: Reduced apportionment, continued reliable crude oil delivery, and energy cost savings on a per barrel basis for Minnesota refineries.

Line 3 Replacement will provide almost immediate economic benefits to Minnesota communities. From restaurants to hotels, retail shops to gas stations, campgrounds to car dealerships, thousands of dollars will be spent near the pipeline route.

Testimonials



"Business is even greater than our vacationer business when construction activity is going on."



"We absolutely welcome pipeline workers."



"We feel a direct benefit when construction projects ramp up and it's across the board from sales to parts and service. We're grateful for the business."



"We experienced at least a 35 percent jump in business during pipeline construction in 2009."



"I definitely welcome pipeline workers and pipeline construction. All the businesses in town do."



"Pipeliners need clothing to stay warm and work boots, too. They spent on average about eight times as much as our regular customers when they came in. They were very patriotic."



Line 3 Maintenance and Integrity Program

Safe and reliable operations have always been the foundation of Enbridge's business, and maintaining pipeline integrity is essential to continued safe and reliable operations.

As part of our maintenance program, Enbridge has gathered extensive integrity data on Line 3. The data has been analyzed, resulting in the need for a substantial number of integrity digs and repairs. Additionally, since 2008, Enbridge has voluntarily restricted pressure, reducing the average annual capacity of deliveries from 760,000 barrels per day (bpd) to 390,000 bpd.

While Line 3 could continue to be safely operated through the current maintenance plan, the dig and repair program will not restore the delivery capacity of the line. Replacement of Line 3 is the optimal solution to restore this pipeline to its historical operating capabilities.

Integrity Dig Steps



Identify dig site and strip topsoil where applicable



Excavate to expose the pipe



Clean the exposed pipe



Inspect the pipe



Repair the pipe segment, as necessary



Re-coat the pipe



Backfill excavation and cleanup



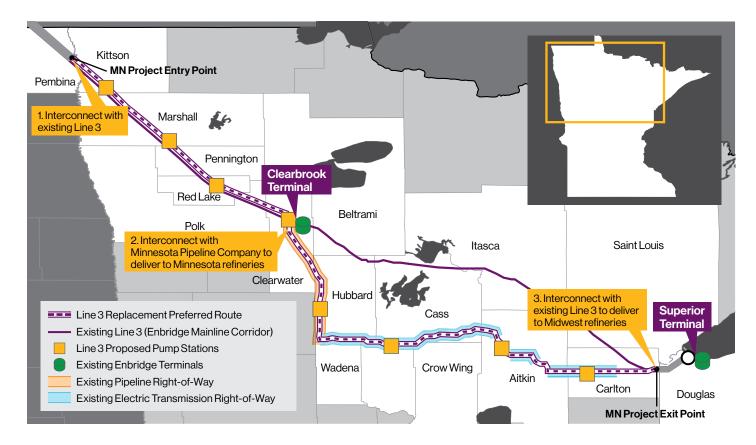
Restoration



Restored right-of-way



Line 3 Preferred Route



Any route that does not meet the three initial requirements (as identified above) would not meet the purpose of the Project, and such routes were not considered by Enbridge in its development of the Project's preferred route.

Route Selection Process

Enbridge developed the Project's preferred route based on its extensive pipeline routing experience, knowledge of applicable federal and state regulations, as well as agency, landowner and other input.

Enbridge first considered where the Project must enter, deliver within, and exit Minnesota in order to meet the needs of shippers served by Line 3. Enbridge next identified and analyzed routing constraints and opportunities, and identified and analyzed route alternatives.

Once a general route location was identified, Enbridge conducted detailed environmental and engineering survey work to further refine the route to avoid or minimize human and environmental impacts, as well as identify appropriate mitigation measures to limit potential impacts during Project construction and operation. The resulting preferred route meets the Project's purpose, maximizes opportunities for colocating within a utility corridor, and minimizes potential impacts.



Potential Environmental Impacts of Line 3 Preferred Route

The Project route, facility design, and construction procedures have been designed to minimize impacts on the environment. Environmental impacts associated with construction of the pipeline will primarily be related to temporary disturbance to land, wetlands, and waterbodies. Environmental impacts associated with operations of the pipeline will primarily be related to maintenance repairs and mowing activities.

In 2014, Enbridge started working with federal, state, and local regulatory agencies to design Project plans and permit conditions to minimize impacts to the environment. In fact, Enbridge has already committed to a variety of resource-specific mitigation measures. Enbridge will also retain environmental inspectors (Els) during Project construction who will be responsible for understanding all regulatory requirements and permit conditions, and ensuring that contractors abide by these conditions. The Project will also be supervised by third-party environmental monitors who will report any concerns directly to appropriate agencies.

2,901

number of tracts/sites where surveys were conducted 1,133

tracts where wetland & waterbody delineations were conducted

1,036

tracts/sites where Phase I & Il Cultural surveys were conducted

94

percent of surveys are completed

306

field staff conducting surveys in 2014 303

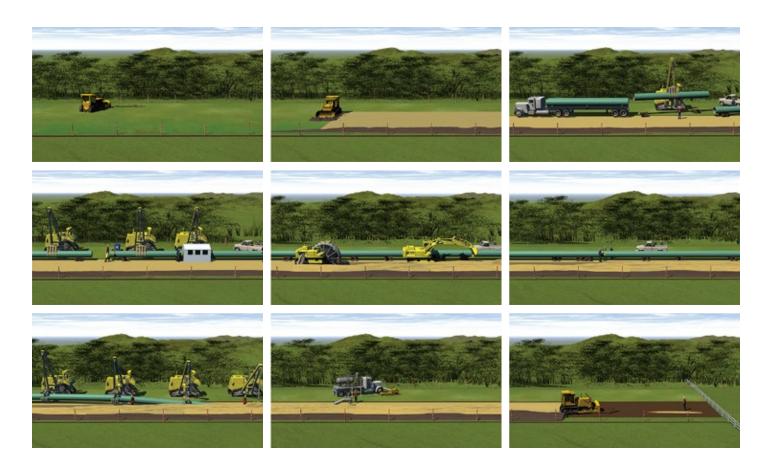
northern long-eared bat sites studied

Right-of-Way Preparation and Construction

Planning for any pipeline project begins years in advance of actual construction. Initial steps in the planning process include determination of demand from refineries, pipeline design, route alternatives and selection, environmental assessments, public consultation, landowner negotiations and government permitting. Once these steps are complete, the construction process can begin.

The illustrations below show the general process beginning with surveying the route. Then, the right-of-way is cleared. Topsoil is carefully separated along the right-of-way. Pipe sections are then strung along the route. Materials are quality inspected from the factory and throughout the construction

process. Welders then fuse the pipe sections together into a continuous pipeline. All welds are inspected for integrity. A trench for the pipeline is dug generally three to five feet. Depending on the location of the pipeline and where it is crossing, depth of ground cover may increase. The pipeline is carefully set into the trench. Hydrostatic testing is performed prior to placing a new pipeline into service to further measure safe operating pressures. Soil is replaced and the right-of-way is restored following landowner agreements.





These two photos show the same location during construction in August 2013, and following construction in July 2014 as grass grows back over the Enbridge right-of-way in Kansas.

Committed to Successful Restoration of Our Pipeline Systems Rights-of-Way

Enbridge is responsible to landowners for all damages or impacts resulting from construction of expansion facilities, pipeline replacement projects or ongoing pipeline operations. To that end, we have plans and procedures to protect land before, during, and after construction. Enbridge uses approved and proven construction and land restoration techniques. Affected sites are checked throughout the remediation process to ensure restoration of the area has been completed satisfactorily.

Prior to construction activities, Enbridge representatives must obtain a number of regulatory approvals and environmental permits. These permits often prescribe practices and restoration expectations. Enbridge also meets with landowners to reach agreement on property-specific items that will be addressed during and after construction. Items on this "line list" may include landscaping, stacking timber, or special care to be taken when working around livestock.

Following Construction

Following construction of a new pipeline, the process of returning property to its agreed-upon condition generally engages multiple restoration crews spread out along the pipeline right-of-way, with each crew working in a continual linear fashion. This process allows the work to be completed as efficiently as possible.

Enbridge works with approved plans and easement agreements. Weather and road weight restrictions can influence restoration timelines. To ensure a successful restoration, we continue to monitor the restoration in compliance with various environmental permit requirements and Enbridge's routine pipeline patrol and maintenance procedures. If further efforts are needed to complete restoration commitments, we will take the appropriate follow-up action.

Restoration Process

- Crews begin by removing equipment and construction debris, and de-compacting soil in farm fields while restoring rough grade.
- Next, crews replace separated topsoil, seed, mulch, repair fences, and remove construction mats, bridges, and access points.
- Environmental and utility crews will also be mobilized to respond to subsidence and/or drainage issues that create access problems for farmers or landowners, public safety issues, or environmental compliance issues.
- Most restoration occurs within the first year following completion of construction, however the process
 can take longer depending on weather and other environmental impacts that may interrupt the restoration
 process. The initial phase involves a more visible presence of workers but crew sizes vary based on the
 required work.

Coordinating Restoration with Landowners

Following construction, Enbridge representatives contact landowners to review "line list" items, and discuss what items need to be addressed to complete restoration on their property. The "line list" provisions can be attached to easement agreements and amount to an agreement between Enbridge and the affected landowners, giving them an added measure of assurance that the company will perform as indicated. Enbridge is fully committed to the protection of the environments along our pipeline route as well as being a good neighbor to landowners and in the communities in which we operate, and where our employees live.





Line 3 Deactivation

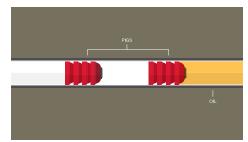
Enbridge will continue to operate the existing pipeline safely while the new pipeline is installed because refineries in the Midwest served by the pipeline rely on continuous deliveries of crude oil to provide the gasoline, heating oil, and other products that we use every day.

Once the replacement pipeline becomes operational, the existing Line 3 will be permanently deactivated.

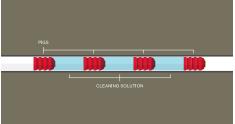
- The oil is removed;
- The pipe is cleaned:
- The pipeline is safely disconnected and isolated from facilities;
- Corrosion controls will be maintained to ensure structural integrity; and,
- The deactivated pipeline will remain in place.

Enbridge is responsible for our pipelines, whether or not those pipelines are active. We will continue to monitor the deactivated pipeline and maintain the right-of-way.

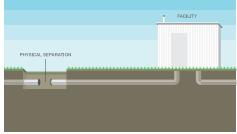
Deactivation Process



vast majority of crude oil is removed from the pipeline using specially designed cleaning instruments.



1. Remove the Oil from the Pipeline: The 2. Clean the Pipeline: A combination of cleaning instruments and cleaning solution is used to wipe and clean the pipeline.



3. Disconnect the Pipeline: The pipeline is physically disconnected and sealed off from active operational facilities like pump stations to prevent oil from re-entering the system.



4. Monitor the Pipeline: Cathodic protection will continue to be applied to the deactivated pipeline.



5. Monitor the Right of Way: Monitor the right-of-way with regular pipeline patrols, pipeline signs indicating approximate location, depth of cover surveys and "Call Before You Dig" Programs.



Commitment to Safety

The safety of the public, our communities and our employees is Enbridge's top priority. To ensure the safe construction and operation of our pipelines, we are committed to safety in our processes, our people and our technologies.

As part of our commitment to the safe and responsible operation of our pipelines, we employ comprehensive preventative measures.

- High-quality pipeline material, anti-corrosion coatings and cathodic protection (a low-level direct current to inhibit corrosion)
- Pressure testing of new and existing pipelines
- Inspection and preventative maintenance programs
- Monitoring of pipelines and related facilities
- Frequent aerial and periodic ground surveys of the right-of-way
- Automatic shut-off valves and remote control valves
- State-of-the-art control center for immediate response in the event of a change in pressure or volume
- Emergency response preparedness training and drills for employees and third-party emergency responders



Construction Safety

- 100 percent of our construction welds are inspected using radiography or ultrasonic testing
- Extensive inspections conducted throughout the Project's process
- Internally inspected and pressure tested before being placed into service
- Cathodic protection system is applied to the pipe and facilities to inhibit corrosion



Maintenance Safety

- Monitored 24-hours a day by our computerized Pipeline Control System and trained controllers
- Comprehensive preventive maintenance on our pipelines and facilities
- Extensive worker training program
- Public awareness outreach
- Periodic internal inspections of our pipelines
- Aerial patrols of our pipeline system rights of way and facilities are conducted twice a month

Emergency Preparedness

- Response Training Our exercises are performed with a variety of scenarios, locations, and at all times of the year. We share lessons learned within our company, with industry, and with local responders. Proven techniques and equipment are used during training exercises and strategically positioned across our pipeline system for immediate access in an emergency.
- **Pipeline Maintenance (PLM)** Four strategically located facilities across Minnesota from the North Dakota border to the Wisconsin border are staffed by four to six trained personnel and staged with emergency response equipment. If the proposed pipeline is approved, additional crews and facilities will be added for the new route.
- Safe Communities Program This program is dedicated to providing grants to first responder organizations located along our pipeline route.
- **Understanding Our Products** Enbridge crews and local responders are familiar with our pipeline system and the petroleum products we transport. We have Material Safety Data Sheets (MSDS) that describe the various grades of crude oil and petroleum we carry that provide an additional resource so workers in close proximity to the products are aware and protected.
- **Public Awareness** Annual mailings, in-person and group meetings are in place to reach out to people who live and work along our pipeline system.
- Community Relationships Our monitoring, testing, maintenance, response training, and community awareness together support overall pipeline safety. Enbridge maintenance and field employees go through annual training and we regularly invite participation from local first responders along our pipeline route and near our facilities.

Minnesota Participation

more than 147

registered for online emergency responder training

more than 59

registered for online 911 dispatcher training program



Enbridge purchased a specially designed helicopter based out of Bemidji that will continue our aerial patrol program

19 exercises

Enbridge response teams conducted 19 emergency response exercises in the Superior Region during 2014.

\$36,500

In 2014, we contributed \$36,500 to Minnesota emergency response agencies through our Safe Community Program and have donated 15 fleet vehicles to first responders over the past five years

Public Participation

It has always been evident to Enbridge that construction of a pipeline starts with open and frank discussions within the community. To that end, Enbridge has and will always be committed to meaningful and robust communication and dialogue throughout the development, construction, and operation of the Project. As with all of its projects, Enbridge's goal is to provide Project information to, receive input from, and address questions and concerns raised by those affected by the pipeline.

To achieve this goal, Enbridge developed a Line 3 public outreach plan designed to provide a variety of ways for all interested parties to obtain information about and provide input regarding the Project. Enbridge has identified and reached out to landowners likely to be affected by the Project, elected and public officials at all levels of government (federal to township), emergency responders, business and environmental groups, community groups, other interested parties, and the public. This initial approach to public outreach provides opportunities for stakeholders to provide input and learn about the Project in its early stages.

Enbridge's outreach activities include, but are not limited to, providing listening sessions and open houses in communities along the Project's preferred route, sending Project introductory letters to elected officials and potential landowners along the preferred route, creating news releases and media advisories, publicly-available fact sheets and survey results, leading one-on-one meetings with individuals and local groups, and offering various means by which the public can connect with Project representatives. Enbridge will continue these activities throughout the life of the Project.



Stay Informed

The Minnesota Public Utilities Commission's (MPUC) process provides multiple opportunities for public participation, including public meetings and public comment periods. Minnesotans can stay informed and follow the progress of regulatory approvals by visiting the MPUC's website at **www.mn.gov/puc**.

 Simply click on "eFiling and eDockets" and go to "Search Documents" where you can look for the docket number that applies to the particular project (Route Permit - PL-9/PPL-15-137, Certificate of Need - MPUC Docket No. PL-9/CN-14-916).

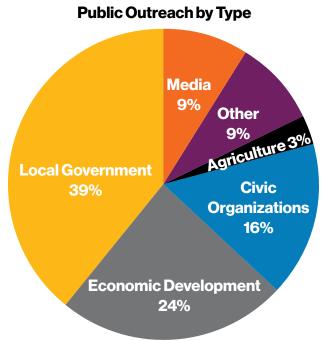
Commitment to Public Outreach

In addition to the open houses held in December 2014, Enbridge's public outreach efforts have included oneon-one meetings with individuals, agricultural-based organizations, business organizations, civic organizations (including environmental and conservation organizations), state and local governments, and media organizations. Between March 2014 and April 2015, more than 300 meetings were held with stakeholders along the Project's Preferred Route to present Project information and answer questions and concerns about the Project. Enbridge will continue to meet with stakeholders throughout Project development to listen to input and share information regarding the Project.

Project Contacts:

- Website: www.enbridge.com/Line3
- Email: Line3ReplacementProject@enbridge.com
- Toll-free number: **1-855-788-7812**
- Mailing address: Enbridge Energy

Line 3 Replacement Project 1409 Hammond Avenue Superior, WI 54880



Public Participation and Agency Coordination by the Numbers

7 open houses — 350+ people attended 1.033 2.516

stakeholder notification letters sent

landowner notification letters sent

13,938

Line 3 website visits since April 1, 2014

stakeholder engagements

comments received via email and hotline

Line 3 Minnesota Regulatory Process

ROUTE PERMIT PROCESS MPUC DOCKET NO. PL-9/PPL-15-137



Application Submitted April 2015



App. Acc MP

Application Accepted by MPUC





Public Information Meetings and Comment period*



Alternative Routes and Route Segments proposed*





Route Accepted for Consideration at Hearing



MPUC or Designee Conducts Comparative Environmental Analysis





Public and Evidentiary Hearings before an Administrative Law Judge*



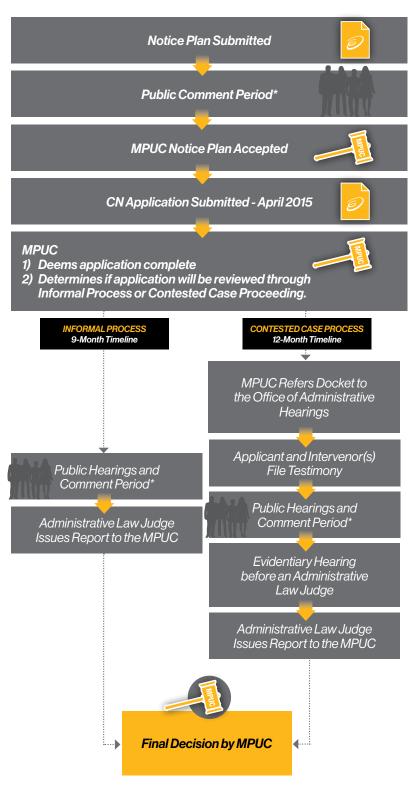
Report of the Administrative Law Judge



Final Decision by MPUC

*Public participation opportunities

CERTIFICATE OF NEED (CN) PROCESS MPUC DOCKET NO. PL-9/CN-14-916



Take Action— Five ways to show your support:



1. Share your support in conversation



2. Write a letter to the editor of a local or regional paper



3. Follow us on social media









4. Sign up for our newsletter to keep in touch



5. Watch for announcement of public comment period

Line 3 Replacement Project

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