



Proposed Mainline Natural Gas Expansion

Presentation to Development Services Committee

City of Markham, May 6, 2014



Introductions



TransCanada Representatives

Mark Mulder – Manager, Pipeline Projects (Presenter)

Janice Badgley – Senior Community Relations Advisor

Brian MacDonnell – Senior Land Representative

Sharan Kaur – External Communications Specialist

Ascentum Representative

Adrienne Fournier – Associate, Community Relations

Presentation Agenda



- 1. Why We're Here**
- 2. Natural Gas Transmission**
- 3. Project Overview**
- 4. The Need for New Energy Infrastructure**
- 5. New Transmission Pipeline Facilities**
- 6. Community Map**
- 7. Landowner Engagement**
- 8. Project Schedule**
- 9. The National Energy Board (NEB)**
- 10. Stakeholder & Aboriginal Engagement Program**

1. Why We're Here



TransCanada is committed to engaging early and often with all stakeholders and Aboriginal groups who may be affected by this project. We are here today as part of an on-going consultation process that will extend throughout the life of the project.

We are here to:

- Introduce TransCanada's proposed natural gas pipeline project and members of our project team.
- Share information about our landowner and community engagement program.
- Provide you with information about the National Energy Board (NEB) regulatory process and how you and your community can get involved.
- Respond to questions about this process and seek your input to help us improve project planning and minimize potential impacts.

2. Natural Gas Transmission



Pipelines are the safest method of transporting the huge volumes of natural gas that are moved throughout Canada every day.

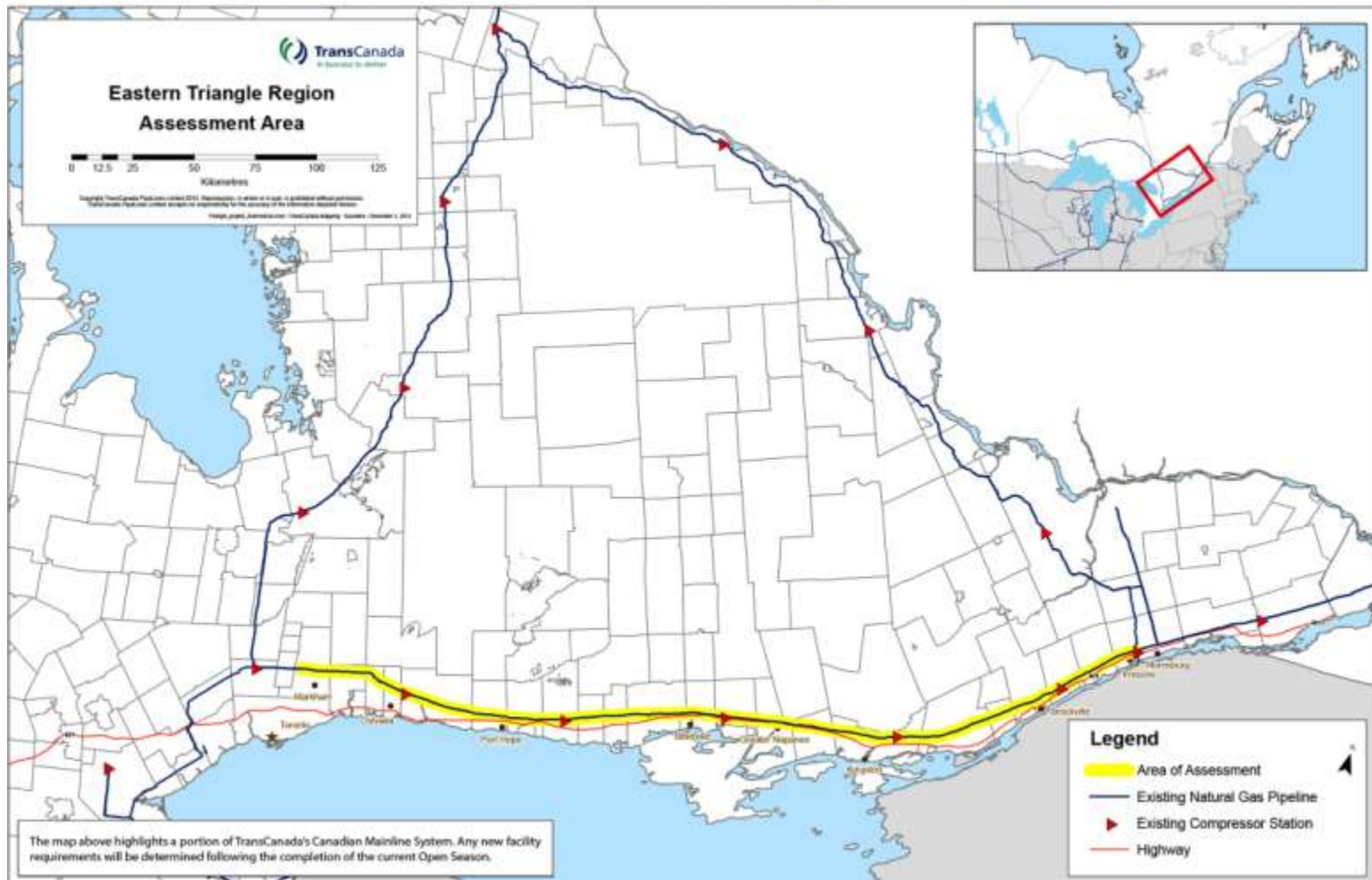
Natural gas properties:

- Natural gas is lighter than air and disperses and dissipates quickly.
- Our pipeline and facilities are designed, constructed and operated to meet or exceed industry standards, regulations and laws.
- Natural gas transported through our pipeline systems is used to heat homes and must meet TransCanada's specifications.

3. Project Overview



TransCanada's Proposed Canadian Mainline Natural Gas Pipeline Expansion



4. The Need for New Energy Infrastructure



TransCanada is proposing to construct new natural gas pipeline facilities between the City of Markham and the community of Iroquois in South Dundas Township.

Commercial Drivers

- Customer demand in Ontario and Eastern Canada.
- Increased access to secure natural gas supplies to support improved distribution throughout the region.
- Sufficient capacity to meet the requirements of the gas market following the proposed transfer of a portion of TransCanada's Canadian Mainline to crude oil service as part of the Energy East Project.

5. New Transmission Pipeline Facilities



Pipeline and Facilities

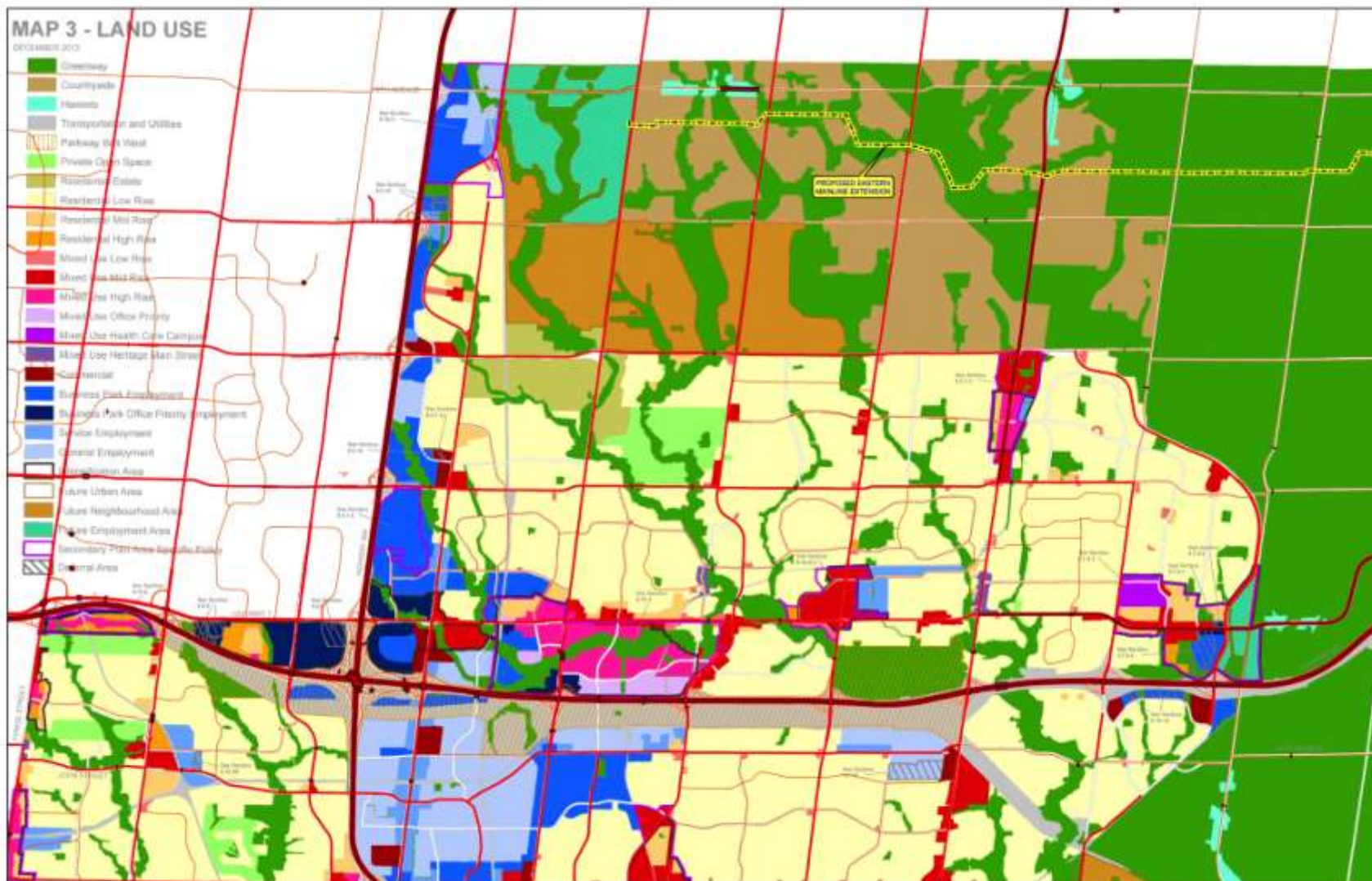
- Installation of a parallel pipeline adjacent to TransCanada's existing right-of-way (ROW).
- Up to 370km in length.
- 36-inch diameter pipe.
- New compressor units at five existing compressor station locations.
- Additional land for the new ROW and temporary workspace for construction.

Route Deviations

- Deviations from the existing ROW will be required due to:
 - Environmental features.
 - Land uses adjacent to the ROW.
 - Construction constraints.
 - Stakeholder feedback.



6. Community Map



7. Landowner Engagement



Key Stats – To date...

- 1,300 = approximate number of landowners along the new ROW.
 - 98% have been visited by TransCanada's land agents.
 - 81% have signed the survey acknowledgement form for TransCanada to conduct field studies and environmental assessments.

New Easement Lands

- ROW land is retained by the owner through an easement agreement.
- Landowners will be compensated at appraised market value for any lands encumbered by the new easement and for any loss of value to the remaining lands.
- Landowners will be compensated for all lands used on a temporary basis during construction.

8. Project Schedule



Proposed Mainline Natural Gas Expansion	
Landowner, Community and Aboriginal Engagement	December 2013, ongoing
Environmental and Engineering Field Work	April 2014 to February 2015
Project Description to NEB	May 2014
Community Open Houses 1 st Round	May – June 2014
NEB Section 52 Application	Q3 2014
Community Open Houses 2 nd Round	Fall 2014
NEB Hearing	Timing and format TBD by NEB
Construction Commences (pending approval)	2016

9. The National Energy Board (NEB)



Under the National Energy Board Act and its regulations, the NEB acts in the Canadian public interest by consulting various government ministries, ensuring safety and security, and assessing a review process that includes:

- Engineering and environmental studies to help plan construction and analyze potential impacts on water, land, air, wildlife and fish habitat.
- A socio-economic assessment of anticipated benefits and effects on local employment, taxes, goods, services, and heritage and cultural resources.
- An Environmental Protection Plan that specifies how the project will consider environmental features through construction and reclamation.
- An inclusive, accessible and comprehensive stakeholder and Aboriginal engagement program.

10. Stakeholder & Aboriginal Engagement Program



TransCanada is committed to:

- Initiating timely, effective and meaningful engagement with all Aboriginal groups and stakeholders who may be affected by the project.
- Working closely with landowners to minimize disturbance to the land, the owners and the environment.
- Providing stakeholders with information and opportunities to ask questions and to participate in the NEB regulatory process.
- Responding to concerns throughout the life of the project and ensuring all stakeholders understand how their input influences the design, construction and operation of the proposed project.

Q&A and Reference Slides



- 1. TransCanada's Right-of-Way and NEB Safety Zone**
- 2. Reclamation – Our Commitment to Landowners**
- 3. Safety, Integrity and Maintenance**
- 4. Key Project Contacts**
- 5. Today's TransCanada**
- 6. TransCanada Corporation**

THANK YOU

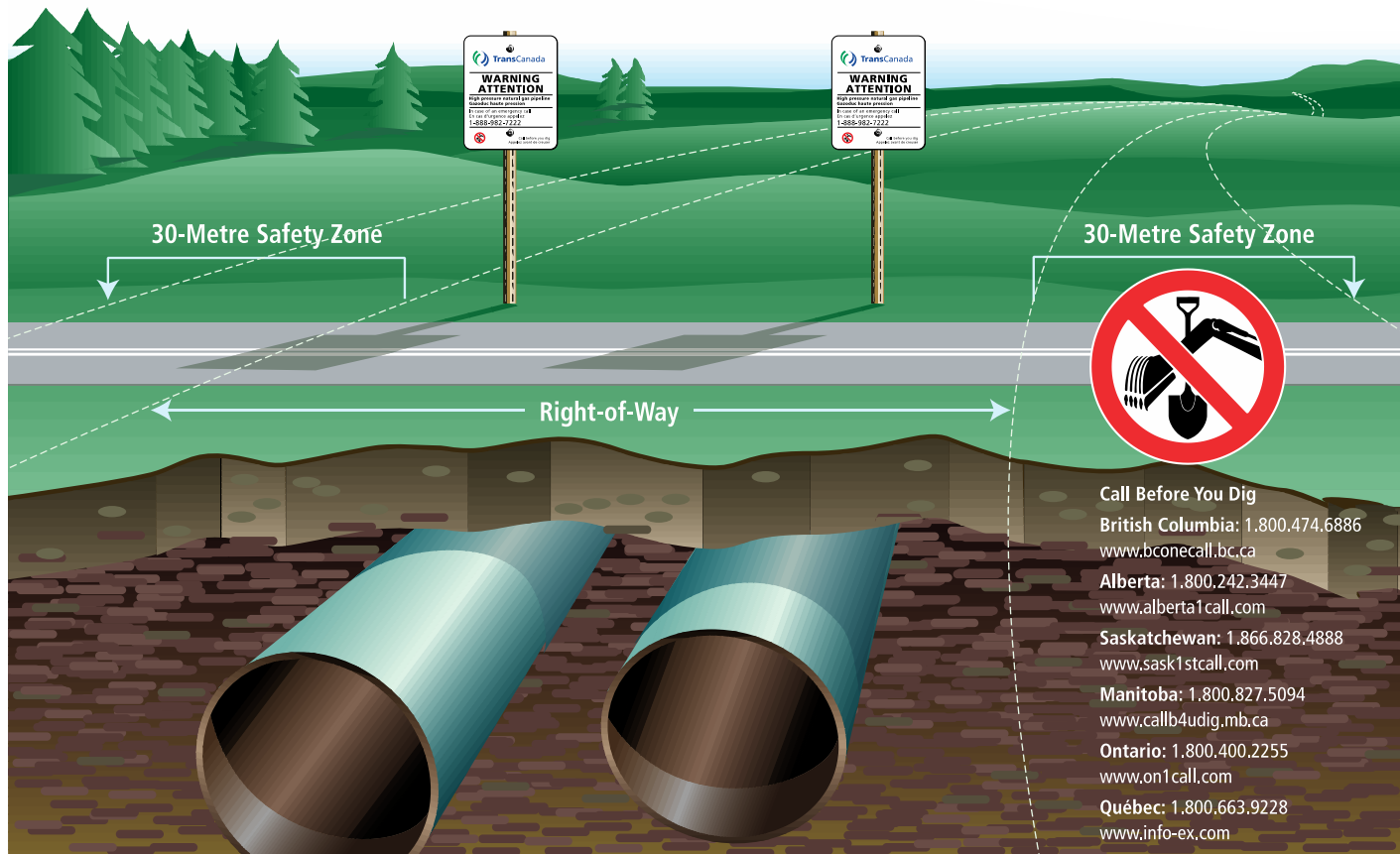
1. TransCanada's Right-of-Way and NEB Safety Zone



Call Before You Dig



At TransCanada, the safety of the public and our employees is our top priority. National Energy Board regulations restrict activities near our pipeline rights-of-way that could pose a threat to public safety and the operation of the pipeline. Pipeline marker signs show the **approximate** location of TransCanada's facilities. **You must call before you dig!** Prior approval from TransCanada is required for all activities on the right-of-way and if you are using explosives or power-operated equipment to excavate within the 30-metre safety zone.



NOT TO SCALE
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2. Reclamation – Our Commitment to Landowners



With over 60 years of experience, TransCanada has successfully reclaimed thousands of acres of pipeline rights-of-way throughout North America.

- TransCanada is committed to minimizing the pipeline's footprint during construction and after the pipe is in the ground.
- Great care and planning is taken to minimize and avoid impacts to the environment, including soil, water crossings, rare or endangered species, vegetation and habitats, and historical and paleontological resources.
- Once the pipeline is in place, landowners have the right to fully use and enjoy the right-of-way, in most cases without having to notify TransCanada and as long as the operation or integrity of the pipeline is not compromised.
- This includes normal agricultural practices such as plowing, fertilizing, disking, harrowing, cultivating, seeding, planting, spraying, tilling, baling, rolling and harvesting.

3. Safety, Integrity and Maintenance



From design and construction to operation and maintenance, safety is an integral part of everything we do.

Design:

- TransCanada uses top quality steel and welding techniques throughout our pipeline system to ensure we meet and exceed industry standards.
- We take additional safety precautions where pipelines cross roads, railways, waterways and communities.

Construction:

- All welds are checked by x-ray or ultrasonic examination.
- Hydrostatic testing is used to verify the integrity of the pipeline and welds.
- The external surface of the pipeline is coated to protect against corrosion.

Operations:

- The entire system is monitored 24 hours a day, 365 days a year, by highly trained TransCanada employees from a computerized control centre.

3. Safety, Integrity and Maintenance Cont'd...



Ongoing maintenance is performed on all portions of the system to monitor, inspect and maintain the integrity of our pipeline facilities.

Some of these programs include:

In-Line Inspection – specialized internal inspection devices, “smart pigs,” travel through the pipeline collecting data.

Investigative Digs – sections of the pipeline are excavated to investigate condition and integrity.

Hydrostatic Testing – safely verifies the integrity of the pipeline and welds by pressure testing the line with water.

Cathodic Protection – low-voltage current that protects the pipe from corrosion.

Aerial Patrols – the line is regularly inspected for hazards or disturbances that could affect the integrity of the pipeline and sensitive leak detection equipment is used to identify small leaks.

4. Key Project Contacts



Primary Contacts

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5. Today's TransCanada



TransCanada in Ontario*

Length of Natural Gas Pipeline	8,106 km
No. of Compressor Stations	74
No. of Landowners	5,364
No. of Employees	285
Salaries	\$36.4 M
Operating Expenses	\$42.3 M
Capital Expenditures	\$944.0 M
Property Taxes	\$75.2 M
Provincial Taxes	\$15.7 M
Community Investment	\$1.6 M

TransCanada is an active participant in Ontario's energy market.

In addition to our extensive natural gas transmission system, we own and operate the Halton Hills Generation Station.

TransCanada is also a partner in Bruce Power and the Portlands Energy Center, and by the end of 2014, will have nine new solar farms in operation to support our commitment to emission-less energy sources.

*Updated December 31, 2012. See *TransCanada's Impact in Ontario* for more details.

TransCanada Corporation (TSX/NYSE: TRP)

One of North America's Largest Natural Gas Pipeline Networks

- Operating 68,500 km (42,500 mi) of pipeline
- Average volume of 14 Bcf/d or 20% of continental demand

North America's 3rd Largest Natural Gas Storage Operator

- 406 Bcf of capacity

Canada's Largest Private Sector Power Generator

- 21 power plants, 11,800 MW
- Diversified portfolio, including wind, hydro, nuclear, coal, solar and natural gas

Premier North American Oil Pipeline System

- 1.4 million Bbl/d ultimate capacity*

*Keystone Wood River/Patoka and Cushing Extension sections in operation
Gulf Coast pipeline project under construction
Keystone XL pipeline project in development
Houston Lateral pipeline project in development

