

THE BETTER MOVE

In 2008 Metrolinx formally adopted *The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area*. This comprehensive document outlines the agency's plans for an integrated regional transit infrastructure, including an \$875 million investment in the Georgetown Corridor.

The Clean Train Coalition strongly supports this long overdue investment in rail infrastructure, but the proposal to run more than 400 diesel-powered trains through one of the most densely populated areas of our region is a step in the wrong direction. The project as currently planned will endanger our health, pollute our environment, and damage our neighbourhoods.

The Better Move, a much-improved plan developed by the Clean Train Coalition, calls for immediate electrification of all trains along the Georgetown rail corridor. This plan is achievable, affordable and environmentally friendly.

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TRANSIT FOR A HEALTHY CITY



THE METROLINX PROPOSAL FOR THE GEORGETOWN/PEARSON RAIL CORRIDOR

Metrolinx is proposing an eight-fold expansion of GO Transit service between Union Station and Georgetown and the addition of a direct rail link from Union Station to Pearson Airport. Currently, approximately 50 trains per day run through the corridor. At launch, Metrolinx will increase that number to 300 or more trains per day, with full service projecting up to 500 trains per day.

But Metrolinx proposes the exclusive use of diesel locomotives. This will make it the single busiest diesel rail corridor on the planet.



ADVERSE HEALTH EFFECTS OF THE METROLINX DIESEL PROPOSAL

Diesel locomotives harm human health. Diesel trains emit a number of harmful fumes and particulate matter linked to cardiovascular disease, respiratory disease, cancers and premature death (Canadian Medical Association and Toronto Public Health).

The fumes contain fine and ultra-fine particulate matter that accumulate in the lungs and pose an especially potent danger to children and the elderly. These particles can also enter the brain and potentially influence the central nervous system.

Nitrogen oxides (NO_x) from diesel fumes have been linked to a variety of human health concerns, including effects on breathing and the respiratory system, damage to lung tissue, and premature death (US Environmental Protection Agency).

The Georgetown rail corridor runs through ten heavily populated residential communities within Toronto city limits. Over 300,000 residents live within one kilometre of this corridor and more than 30,000 children attend schools within the same distance. There are 44 daycares and long-term care facilities within 300 metres of the tracks. All of these residents and children will be at risk.

ARGUMENTS AND TRUTHS

Argument: It's better to take a large number of people out of their cars and put them onto trains, even if those trains use diesel locomotives.

In reality, diesel-powered trains are not always better. A 2007 study of the Chicago area found that the smog-forming nitrogen oxides (NO_x) emitted annually by diesel locomotives alone were equivalent to the emissions of 23 million cars. Consider the fact that in 2008 there were only 21 million road motor vehicles registered in all of Canada!

Argument: Metrolinx states that it will use clean diesel, which is much better for our health and environment than regular diesel.

There is no such thing as "clean diesel." The cleanest standard, Tier 4, is indeed the least polluting form of diesel. But Metrolinx doesn't intend to use Tier 4 for any of its trains. Metrolinx hopes that the new air-rail link trains will be Tier 3, but these have not yet been purchased and the decision will be in the hands of a private operator. The bottom line is that the majority of train traffic on this corridor will be a combination of dangerous Tier 0, Tier 1 and Tier 2 diesels.

Argument: Metrolinx states that it will electrify within 15 years. Metrolinx has argued that it can't afford to study and implement electrification for this corridor right now.

The Lakeshore line has already been prioritized by the province for electrification, but only 136 trains per day will use that corridor, and it is far less densely populated. The Georgetown corridor, with three to four times as many diesel trains, is much more critical in terms of health impacts to nearby residents and schools. It should be made the number one priority for electrification immediately.



OUR PROPOSAL: THE BETTER MOVE

The Clean Train Coalition urges Metrolinx and the province to immediately prioritize the electrification of the Georgetown/Pearson rail corridor. The affected region is densely populated and very vulnerable to the effects of diesel pollution. This warrants the immediate study and implementation of an electrified system—which will better support the needs of public transit in the growing corridor.

THE STRENGTHS OF ELECTRIFICATION

Health, Environment and Community

There are no local health or environmental impacts from electric trains. Electric trains receive their power from the grid—they have no emissions and they don't pollute.

Electric Trains can be powered using renewable, green energy such as wind or solar. As our province continues to work towards cleaner, greener energy sources, electric trains will immediately benefit from these technological advancements.

Electric trains are more energy efficient. They reduce our carbon footprint and our contributions to global climate change. Electric vehicles are approximately four times more efficient than vehicles using internal combustion engines.

Electric trains are lighter and quieter. They don't disrupt the activities of residents and businesses. Lighter trains also require less energy to operate.

Electric Trains are faster. Electric trains can accelerate much faster than diesel locomotives, thus permitting more stops without sacrificing travel times. Using electric trains will better support the overall transit needs along this growing corridor.

Economics

Electric Trains are feasible. By Metrolinx' own estimate, electrification costs \$5 million per kilometre, which means that electrifying the line from Union to Brampton will cost \$150 million. This is only a 17% increase to the current \$875 million price tag for this portion of *The Big Move*. The cost of electric rolling stock will not differ significantly from that of diesel, and there will be lower maintenance costs because the lighter equipment will cause less wear on infrastructure.

Now is the ideal time for investment. The relative cost of financing, materials and equipment is at an all-time low due to our efforts to stimulate economic recovery. This is an advantage that cannot be expected 15 years from now. Furthermore, pollution increases generate secondary costs to our healthcare system and to our workforce, as well as lifelong impacts on the health of our children. Electrifying the corridor at a later date will mean higher costs and wasted public tax dollars. Given the serious negative impacts and unknown costs of diesel emissions on public health for the next 15–50 years, **we cannot afford not to electrify now.**

Electric trains stimulate the economy. An investment in electrification of the system now will stimulate Ontario's electric train, technology and energy industries, creating green jobs. It will position Ontario's industries to capitalize on the move to electric rail that is happening in California and elsewhere in the United States.



A GREEN LEGACY

We need to get our region moving, but let's get it moving in the right direction. A revised plan that champions electrification *now* will truly stimulate Ontario's green economy, putting shovels in the ground while working to build our province's capacity for technological innovation and transit leadership.

The Province of Ontario speaks proudly of its **Green Agenda**. Planning for immediate electrification of the Georgetown South Corridor and Air Rail Link presents an ideal opportunity to lower pollution, create green jobs and better protect public health.

Embracing this bold agenda will be a legacy for the Province of Ontario. Let's do it right from the start.

Sources:

Train volumes on the GSSE corridor: http://metrolinx-consult.limehouse.com/portal/gsse/gsseuprl_vohr1?pointId=1240338571018#section-1240338571018

Chicago locomotive emissions: http://www.edf.org/documents/5737_SmokestacksRailFactSheet.pdf

Canadian motor vehicle registrations: <http://www40.statcan.gc.ca/101/cst01/trade14a-eng.htm>

Diesel tiers: http://metrolinx-consult.limehouse.com/portal/gsse/gsseuprl_vohr1?pointId=1239738521387#section-1239738521387

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ABOUT THE CLEAN TRAIN COALITION

The Clean Train Coalition was formed in April 2009 in response to the Government of Ontario's plans for the Georgetown South Service Expansion and the Union-Pearson Rail Link. Members of the Clean Train Coalition and the communities they represent believe that public health, the natural environment and vibrant neighbourhoods depend on smart investment in public transit infrastructure.

This document is an excerpt from **The Better Move**, a soon-to-be-released report authored by the Clean Train Coalition that outlines a detailed alternative to *The Big Move*. Our goal is to show that there is an alternative—that clean transit is possible. **The Better Move** achieves the vision and objectives of the province realistically, without compromising the health and quality of life of residents in the region.

For more information contact: Carina Cojeen 416 886 2320

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The Clean Train Coalition represents the communities along the rail corridor. We believe that a healthy environment and vibrant neighbourhoods depend on smart investment in public transit infrastructure.

Build it once, build it right!