

Train Anti-Whistling Update



Tuesday June 10, 2008
Development Services Committee

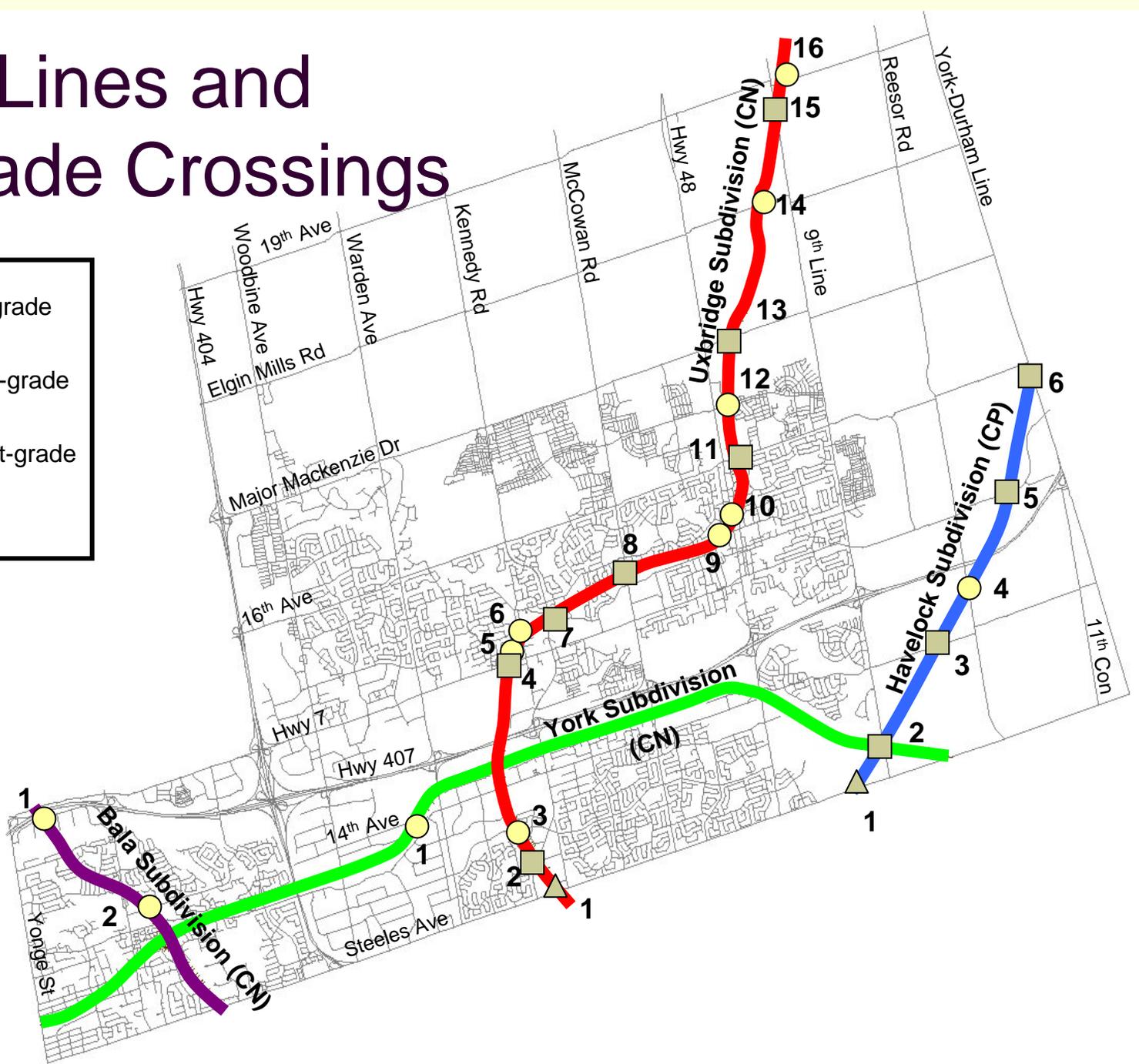
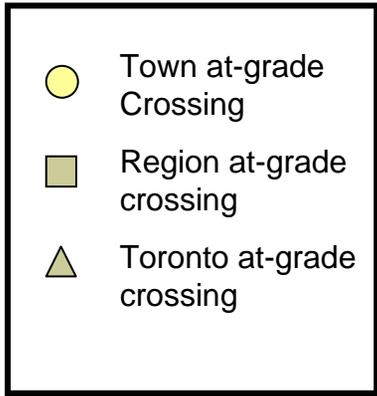
Engineering and Finance Departments

Purpose

- Confirm Status of Train Lines in Markham
- Resident Concerns
- Train Anti-whistle Facts
- Region's Draft Train Anti-whistle Policy and Staff comments
- Risk Management Considerations
- Next Steps



Train Lines and At-Grade Crossings



Train Lines: Bala, Havelock, York

■ Bala – CN Rail / GO Transit

- Two At-grade crossings
 - Langstaff Road East
 - Green Lane
- Train Anti-Whistle By-law 2244 approved in 1966 (compliance rate unknown)
- Freight trains
 - approximately 40 trains per day during weekdays
 - approximately 20 trains per day during weekends
- GO Transit – 5 morning and 5 afternoon trains per day during weekdays
- Via 2 trains per day

■ Havelock – CP Rail

- Six At-grade crossings
 - Steeles Avenue East
 - 9th Line
 - 14th Avenue
 - Reesor Road
 - Highway 7
 - York-Durham Line
- No Train Anti-Whistle by-law
- Freight trains – 2 trains per day
- GO – currently undertaking feasibility study to provide service to east Markham, Pickering, Whitby and ultimately to Peterborough.

■ York – CN Rail

- One at-grade crossings
 - 14th Avenue (west of Warden Avenue)
- No Train Anti-whistle by-law
- Freight train
 - Approximately 40 to 57 trains per day
- GO Transit – N/A



Train Lines: Uxbridge

- Uxbridge – GO Transit only
- 1986 - Train Anti-whistle By-law 46-86 at:
 - Hwy 7
 - Eureka Street
 - Kennedy Road
- 1987 - Letter by Canadian Transport Committee to Town not approving By-law 46-86
- 16 at-grade crossings
 - Eight Town Crossings
 - 19th Avenue
 - Elgin Mills Road
 - Bur Oak Avenue
 - Main Street Markham
 - Snider Drive
 - Main Street Unionville
 - Eureka Street
 - Denison Street
 - Seven Regional Crossings
 - 9th Line
 - Major Mackenzie Drive
 - 16th Avenue
 - McCowan Road
 - Kennedy Road (north of Austin Drive)
 - Highway 7
 - Kennedy Road (south of Denison Street)
 - One Toronto Crossing
 - Steeles Avenue East



Train Line: Uxbridge

- No overnight train operations
- No freight train operations
- Day-time GO train operations in Markham
 - Five morning southbound trains
 - **5:35 am to 8:34 am**
 - Five afternoon northbound trains
 - **4:47 pm to 7:18 pm**
- Future service
 - December 13, 2007, Government of Ontario announced funding for lay-by tracks to allow all day two-way service scheduled for late 2009/2010
 - Expected increase in trips is pending outcome of GO Transit feasibility study



Residents Concerns

- Unnecessary use of train horn predominantly through Unionville and Markham areas along the Uxbridge Line
- Request for 24/7 train anti-whistling

Train Whistling – Facts

- Through the Canadian Rail Operating Rules, locomotive engineers are required to:
 - sound the train whistle at approximately 400 meters (quarter mile) in advanced of every public crossing
 - Continue to sound train whistle until crossing is fully completed
- Under an anti-whistling by-law, locomotive engineers can continue to use the train whistle at their discretion

Train Anti-whistling in Ontario

- There are at least 25 municipalities in Ontario that have anti-whistling by-laws in place. Local municipalities with anti-whistling on double tracks are listed below (*reference Transport Canada*):

| MUNICIPALITY | CROSSING LOCATION | MAX # TRAINS PER DAY | # VEHICLES PER DAY |
|---------------|--------------------|----------------------|--------------------|
| Markham | Green Lane | 20 to 40 | 8,000 |
| | Langstaff Rd | 20 to 40 | 2,000 |
| Richmond Hill | Centre St | 19 | 4,240 |
| Brampton | Goreway Dr | 36 | 11,820 |
| | Torbram Rd | 36 | 22,000 |
| | Mill St North | 46 | 3,650 |
| Oakville | Kerr St | 82 | 2,000 |
| | 4th Line Rd | 83 | 7,150 |
| | Burloak Dr | 82 | 4,700 |
| Brockville | Oxford Avenue | 30 | 1200 |
| | Bartholomew Street | 30 | 1000 |
| | Ormond Street | 32 | 4900 |
| | Park Street | 32 | 3800 |
| | Perth Street | 38 | 7900 |
| Burlington | Appleby Line | 67 | 9,724 |

- Uxbridge Line, within Whitchurch-Stouffville, has 2 train anti-whistling crossings: (1) Millard Street (2) 10th Line
- Crossings were warranted as safety devices were installed and there exists low vehicular volume
- Main Street (Stouffville) did not warrant for train anti-whistling as there are high pedestrian and motorist volume

Region's Draft Anti-whistle Policy

- York will accept anti-whistling on regional crossings subject to:

| ITEM | TOWN STATUS |
|---|--|
| 1. Safety audit completed by specialized consultant | Completed for Uxbridge Line in Feb.2005 Audit to be updated at a cost of approx. \$30,000 to \$45,000 |
| 2. Safety audit to be approved by Transport Canada | Updated audit to be submitted |
| 3. Installation of pedestrian gates at pedestrians crossings | 9 out of 16 required at a cost of approximately \$900,000 |
| 4. Educational program implemented in affected area | To be undertaken at a cost of approximately \$20,000 |
| 5. Train anti-whistling period between 10:00 pm to 6:00 am | No overnight trains on Uxbridge Line, therefore overnight anti-whistling does not address resident issues |
| 6. All costs on both Regional and Town roads responsibility of the local municipality | Staff recommend Region fund costs at their crossings |
| 7. Automated Horn System not be considered at this time | Request Region to pursue future use |

- June 11, 2008: The Region staff will be reporting back on the draft Train Anti-whistle Policy to the Region's Transportation and Works Committee.

Estimated Cost to Implement Train Anti-whistling on Uxbridge Line

- Safety Audit Update \$30,000 to \$45,000
- Pedestrian Gates required at nine locations within urban areas of Markham / Unionville Area
 - Pedestrian Gates approximately \$100,000 per location
 - Estimated amount to install pedestrian gates \$900,000
 - Five Region's locations = \$500,000
 - Four Town locations = \$400,000
- Fences requirements \$20,000
- Education Program \$20,000
 - Advertising
 - Mail drop-off
- Total Amount: approximately \$1 Million
 - Region \$500,000
 - Town \$500,000
 - Tax funded
- Approved Budget \$182,145 (account 6501)



Risk Management Considerations

- City of Brockville Incident
- Train Facts
- Additional Considerations
- Town Insurer's (Cowan) Position

Risk Management Considerations

City of Brockville Incident

Before incident

- 24 hr Anti-whistling program in place
- Train crossing: a double track equipped with vehicular gates only with a sidewalk outside the vehicular gates without a pedestrian gate

Incident (July 2005)

- Two grade 7 girls were struck by a train at level crossing between 3 and 4pm
- Two trains approached the crossing in opposite directions
 - The first train passed by the level crossing with the gates down
 - With the gates still down the girls crossed the tracks not aware of the second train coming in the opposite direction

Risk Management Considerations

City of Brockville Incident (Cont'd.)

Immediately after the incident

- CN reinstated their 24-hour whistling program
- Brockville placed crossing guards at the level crossings before and after school

May 2006 (one year after incident)

- Pedestrian gates installed at all level crossings
- CN agreed to halt whistling between 10 pm & 6am with the following requirements:
 - Crossing guards are placed at level crossings during school year
 - Additional evening and overnight police patrols are added at all level crossings
 - Add signage stating whistle-ban in effect between 10pm & 6am
 - If any future incidents or near-miss reports occur the ban will be lifted

Risk Management Considerations

Train Whistling Facts:

Train whistles are a vital safety feature, which protect motorists, pedestrians and train crews from collisions at public crossings. Train whistles alert people that a train is crossing. In some instances, more than one train is about to cross.

- The sole purpose of a train whistle is to alert drivers/pedestrians that an imminent danger is approaching
- A typical locomotive with 100 cars is approximately 6,000 tons
- The weight ratio of an automobile to a train is the similar to a pop can & a car
- Trains require one mile to stop
- Modern trains are much quieter then their predecessors
- Motorists and pedestrians are distracted by different technological devices (cell phones, blackberries, iPods, MP3 Players, etc.) and are not always paying attention to their surroundings. Train whistles can be heard over iPods, MP3 Players

Risk Management Considerations

Additional Considerations

- Sightlines for pedestrians and locomotive operators with respect to each crossing should be taken into consideration – Is there anything (switching stations, curve in the road or railway) that may impede either parties view
- Surrounding occupancies should be considered – schools, seniors home, subdivisions, heavy pedestrian traffic
- Transport Canada's experience with specific crossings – any previous issues
- Train traffic at each specific crossing – if there are multiple trains how are pedestrians and motorists going to be properly notified
- Pedestrian Traffic – is there appropriate signage and safety measures (safety arm preventing pedestrians from crossing) in place with respect to pedestrian crossings
- Special Considerations – high traffic areas with unique risk factors (schools) - stationing a crossing guard at these higher risk locations before and after school should be considered
- Indemnification agreement between GO/CN and the Town is required. Additional liability will then be transfer from the rail authorities to the Town. Consequently, greater insurance premiums may result if an accident were to occur as a result of an anti-whistle by-law

Risk Management Considerations

Town Insurer's (Cowan) Position:

“From a risk management perspective, we do not recommend the cessation of rail whistles at rail crossings. According to the Railway Association of Canada, train whistles are vital safety features that protect motorists and pedestrians from collisions at public road and pedestrian rail crossings. We believe, as does the association, that train whistles save lives.”

Next Steps

- Council direction is requested regarding proceeding with train anti-whistling
- If Council wishes to proceed with train anti-whistling for Uxbridge Line
 - Region's draft policy needs to be revised at their June 11 Committee meeting
 - Anti-whistling to be 24/7
 - York to fund cost at regional crossings
 - Hold harmless clause
 - Meeting with all stakeholders including Region, CN, GO, Transport Canada and local municipalities to clarify train anti-whistle approval process
 - Update safety audit
 - Staff report to Council in Fall 2008 with safety audit, updated costs and implementation program