



Calculating Schedule C Benefits

Project #1 - Bridge Work

Definitions

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AA DT = Average Annual Daily Traffic

R CR = Ride Comfort Rating

MJ = mega joules

Assumptions

- that a road closure will occur for the duration of the project
- that new technologies will be used to reduce the number of days a road closure is required

Details

length of road closed to traffic km
 length of detour route for bridge closure km
 estimated # of days road closed to traffic days
 (conventional construction)

current traffic volume (actual or estimated) AA DT
 % light trucks (pickup) %
 % trucks (heavy truck) %
 % trucks (tractor/trailer) %
 % trucks (B trains) %

The percentage break down will not equal 100% since cars presumably also use the road.

[pavement smoothness \(click here for description\)](#) R CR
 (of road section to be closed)

Current CO₂ Emissions (before road closed to traffic)

Total Current Emissions

NOTE: Based on Natural Resources Canada - 2.36Kg/L CO₂ Gasoline, 2.73kg/L CO₂ Diesel and Transport Canada - Company Average Fuel Consumption 2004

CO₂ Emissions (as a result of the road closure)

[pavement smoothness \(click here for description\)](#) R CR
 (of detour route)

Total Emissions



Increased CO₂ (as a result of road closure)

-696.3	kg/day
0.0	increased kg while detour in effect

Benefits of Using New Technologies

using technologies that reduces the number of days a road closure is required reduces emissions

estimated # of days road closed to traffic (new technologies used for construction)

0	days
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Increased CO₂ (as a result of road closure)

0.0	increased kg while detour in effect
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Reduced CO₂ (a result of using of technologies that reduce the number of days a road closure is required)

0.0	total kg
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