



Calculating Schedule C Benefits

Reesor Road Bridge (B16)

Definitions

- input field
- calculated field (no data entry required)

AADT = Average Annual Daily Traffic

RCR = 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	2.05 km
length of detour route for bridge closure	5 km
estimated # of days road closed to traffic (conventional construction)	225 days
current traffic volume (actual or estimated)	3579 AADT
% light trucks (pickup)	30 %
% trucks (heavy truck)	1 %
% trucks (tractor/trailer)	0 %
% trucks (B trains)	0 %
pavement smoothness (of road section to be closed)	9 RCR

Current CO₂ Emissions (before road closed to traffic)

Total Current Emissions 1545.2

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 (of detour route)	9	RCR
Total Emissions	3,768.9	
Increased CO ₂ (as a result of road closure)	2,223.7	kg/day
	500,321.7	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)	180	days
Increased CO ₂ (as a result of road closure)	400,257.4	increased kg while detour in effect
Reduced CO ₂ (a result of using of technologies that reduce the number of days a road closure is required)	100,064.3	total kg