When the Costs to Repair Shale Gas Road Damage are Greater than Shale Gas Revenues, the Industry is Not Sustainable

The impact on local roads and bridges from the traffic necessary for shale gas extraction is enormous. As of now, the province has not developed a plan to fund road repairs.

The Texas Department of Transportation estimated the following **truck traffic** related to a single shale gas well:

- 1,184 loaded trucks to "bring one gas well into production"
- **353 loaded trucks per year** to maintain one well
- 997 loaded trucks every five years to re-frack a well

In its effects on roads, a single well is the equivalent of 8 million cars, plus another 2 million cars per year for maintenance! Can municipalities pay for damage from such huge volumes of traffic?

Everywhere shale gas is extracted, the actual cost of road repairs has exceeded both government and gas company estimates or revenue. As a result, this unexpected damage to roads has also been responsible for other economic and social costs for which no provision was made.



It severely affects emergency services such as fire and police, hospitals and school buses - both in delivery of services, delays and cost of vehicle repair. Private vehicles as well as essential services and public transportation are also affected.

The statistics from three American state Departments of Transportation shown below are just for the costs of road repair and do not include bridge repair. (Note: While American states collect severance tax or impact fees, NB revenue will come from royalties

U.S. Road Repair Cost Due to Oil and Gas Damage for Three States

State:	State Income: from	Cost of repairs:	Deficit:
Three states with	severance taxes or	for road damage caused by	repair costs not covered
extensive shale & oil gas	impact fees	the oil & gas industry	by revenue from oil & gas
development		(Primarily shale)	industry
Texas 2012	\$3.6 Billion	\$4 Billion	\$400,000,000
Arkansas since '09	\$182 Million	\$450 Million	\$268,000,000
Pennsylvania 2012	\$204 Million	\$265 Million	\$61,000,000

Note: The Cost of Repair to Bridges is <u>Not</u> Included)



In every state where drilling occurs, roads that were designed for 20 years are lasting only 5 years due to overweight vehicles transporting drilling rigs and water for fracking operations. Source: Above data compiled in Externalities of shale: Road damage, /2013/04/01, Deborah Rogers, originally published by Energy Policy Forum

Roads that are in acute disrepair are most susceptible to flooding and problems associated with flooding. During Hurricane Sandy, the roads that were the hardest hit were the roads in the areas most heavily drilled.

Source: Scranton Times-Tribune –'In the heart of the Marcellus shale play'

Road repairs for the province of New Brunswick are generally disbursed from one source, so money spent to repair roads and bridges in shale gas areas will not be available to other areas of the province. In any situation where costs exceed revenue, sustainability is impossible to achieve.

