Notes for panel 4 of Conference "Quelles leçons ...?"

1. (How) Can the transportation of oil-by-rail be made safe?

Yes, but ... Safety of the rail mode in general is contingent on legislative fiat, political will and investment. In Canada, legislation long gave much responsibility to Transport Canada (TC) which attempted to enforce safe practices in part through a régime of inspections. Lately the Rail Safety Act (RSC 1985) has favoured "self-regulation" via approved Safety Management Systems (SMS). TC Inspectors became less numerous and "auditors" now check the railway's paperwork to verify whether the railway has conformed with its own SMS. TC recently hired more inspectors, but the ratio of track-miles to the number of inspectors must still be about 400 mi to one inspector. Political will is however still weak; the ADM who approved the hirings was chastised by his superiors for going on a "hiring spree". TC needs to hire more inspectors and mandate them to go out on the line.

As to infrastructure development, while the two "Class I" railways are quite able to fund infrastructure renewal on their lines, many short line and regional railways are starved for capital. As long as Governments see railways as totally self-financing, this will persist. In the United States, short lines are valued for their contribution to maintaining local and regional economies, and Federal and State programmes are in place to fund selected infrastructure improvements for safety and capacity. In Canada, such dedicated sources of public funding for short and regional lines are long overdue. Their safety and competitiveness will improve to American Short Line standards only if this is put in place. The Canadian economy will benefit too, from better access to markets for Canadian enterprises. See: Interchange Magazine (RAC) "A Safe Investment" on how funding for ... (rail) infrastructure can improve public safety. The effectiveness of public (with private) investment in rail infrastructure is illustrated by the fact that the TSB has removed "TC (in) action on grade crossing safety" from its watch list considering reductions of accident numbers through investment in crossing safety.

2. How (Can) the justice system and the regulatory system be reformed in the wake of Lac-Mégantic? Up to a certain point ...

The criminal justice system is focussed on individual responsibility for mishaps, accidents and occasionally sabotage. In the case of railways, the roots of disaster go far below the individual railwayman, and take root in the fertile soil of shareholder demands, absentee ownership, corporate executive anonimity, lobbying and Governments' benign neglect. In the case of Lac-Mégantic these factors have been well-described in (inter alia) papers by Bruce Campbell, as well as by Investigative journalists and others. In the end, the responsibilities of corporate
actors such as Ed Burkhart tend to be given second place by the justice system, and individuals such as Tom Harding, engineer, are prosecuted. Corporate responsibility should be enshrined in common (civil) law and the criminal code with corporate safety failure to be penalised equally (or more) with that for individual responsibility.

Existing rules are not always enforced by the railways and the regulators. Take signal recognition and "calling" by two crew members in the cab where operators nowadays omit calling. Recommendation RCO-04 of the TSB calls for Transport Canada and the railways to "implement additional safety defences to ensure signal indications are consistently recognised and followed". (In-cab video would be one way of monitoring compliance, as would routine voice recording).

The regulatory system has shown strength in the sterling work of the Transportation Safety Board’s investigations, reports and regulations. The investigations are meant to find causes of accidents, not to assign blame, and this should continue to be the case, so that the reports continue to be objective and extract essential lessons from the smoke and fire of tragedy. Giving the TSB power to make its recommendations mandatory would be a mistake, as the resultant lobbying and occult influences would destroy the TSB’s objectivity. Rather, legislation should be enacted giving Transport Canada 30 days to order TSB-recommended changes and actions by the railways within its existing regulatory powers or state publicly why it is not doing so. Regulations should not however become so numerous as to tie up railway safety development in the manner that railway economic performance was paralysed in the USA before enactment of the US Staggers Act (1980).

In particular the legislator must be attentive to the danger of modal displacement, where over-regulation of railways would in my view simply lead to the traffic going over to trucks as was the case with economic over-regulation. Trucks have higher accident rates than trains and trains are "more than seven times as fuel-efficient" as trucks. (Sources: deposition of Robert Corbett MP to the National Transportation Agency June 1993 and FRA study "Rail vs. Truck Fuel Efficiency" 1991).
Driver fatigue is reportedly a major problem for transport operators, particularly truckers and railroaders and it is new to the TSB "watch list". Regulation of operator hours-of-service is done (inadequately) mode-by-mode. Part-taming of this problem by reducing operator hours on only one mode can increase costs there and incite shippers to migrate to newly cheaper alternatives, such as from train to truck. The danger to human life from global warming is not to be ignored in such transport safety decision-making either.

The TSB has placed transport of flammable liquids by rail on its watch list. Road safety expert Daniel Darveau has publicly called on authorities to "harmoniser les informations sur le transport des matières dangereuses".

3. What are the implications for future oil transportation infrastructure development?

There are major implications to the suggestions above for public investment in railway infrastructure for oil or for freight in general. The rail bypass required for Lac-Mégantic is unfunded and the matter seems to be the subject of strategic delay. True, there is little precedent for such investments in recent times. The National Capital Commission did pay for and create a freight bypass as part of its gentrification of Ottawa in the post-war era, but now "sunny ways" don't seem to mean action and investment in "rail ways" even if it is 2016.

A general policy of treating railways on an equal footing with roads for public investment would have benefits all over Canada, and in particular in Lac-Mégantic; part of this would be letting railways apply directly for infrastructure funding, instead of having to apply through municipalities. Had such a policy existed in 2005, the abandonment of the best avoiding line to keep oil trains out of Toronto, (and Kingston and Ottawa) - that was the Ottawa Valley Railway - could have been avoided. The mandate to railways to plan routes for oil-by-rail to avoid built-up areas is largely meaningless, condemned to belong to the realm of wishful thinking by government inaction when nearly all alternate rail lines were abandoned. There is no longer any other way to go than the mainlines through the big towns and cities. In some cases the Federal Government should "bite the bullet" and pay for at least short bypasses.

As recent events have shown, while oil pipelines take a low toll on human life, they release three times as much product into the environment as do trains. A real answer may be contained in a short injunction by the Greens: "Get off oil!". Harry Gow, Dec. 2016