

Presentation to the Federation of Canadian Municipalities National Transportation and Communication Standing Committee Forum

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Railway Association of Canada
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OUTLINE

- Who we are
- Who you are
- Why are we here – RAC's 20/20 Vision
- Community Challenges and how rail can help
 1. Competitiveness
 2. Congestion
 3. Emissions
 4. Cost to governments and society
 5. Land use
 6. Well-being/safety
- What we need to solve together
 - A. Proximity
 - B. Congestion caused by trains
 - C. Urban Corridors
 - D. Rail capacity/regional linkages and intermodal
 - E. Modal neutrality
- Summary

WHO WE ARE ?

- We are the Canadian Rail industry
 - Some 60 members, with recent entries
- Core representation from all sectors
 - Class 1s: CN and CPR
 - Short lines: Over 40 across Canada
 - Passenger
 - Commuter: AMT, GO, WCE, Capital Railway
 - Intercity: VIA
 - Tourist: 8 across Canada



RAC REPRESENTS CANADIAN RAILWAYS

WHO YOU ARE?

- Represents over 1000 communities across Canada
- Coverage of 80 % of nation's population
- The national voice of municipal government since 1901
- Dedicated to improving the quality of life in all communities by promoting strong, effective and accountable municipal government.

FCM REPRESENTS CANADIAN COMMUNITIES

WHY ARE WE HERE?

The transportation system is critical to the economy, mobility and overall quality of life in all regions and communities of Canada

The RAC 20/20 vision is superior to the Business as Usual (BAU) approach

RAC AND FCM HAVE COMMON INTERESTS

COMMUNITY CHALLENGES AND HOW RAIL CAN HELP

COMMUNITY CHALLENGES AND HOW RAIL CAN HELP

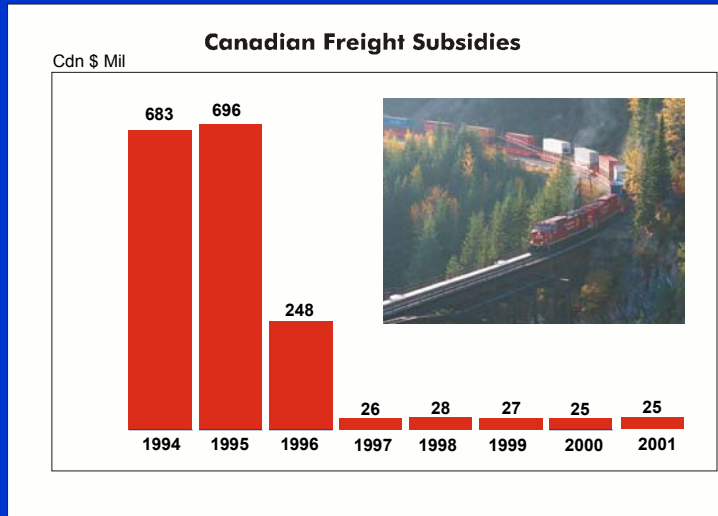
- Six key measures:
 1. Competitiveness
 2. Congestion
 3. Emissions
 4. Cost to Government/Society
 5. Land Use
 6. Well-being/Safety

1. COMPETITIVENESS



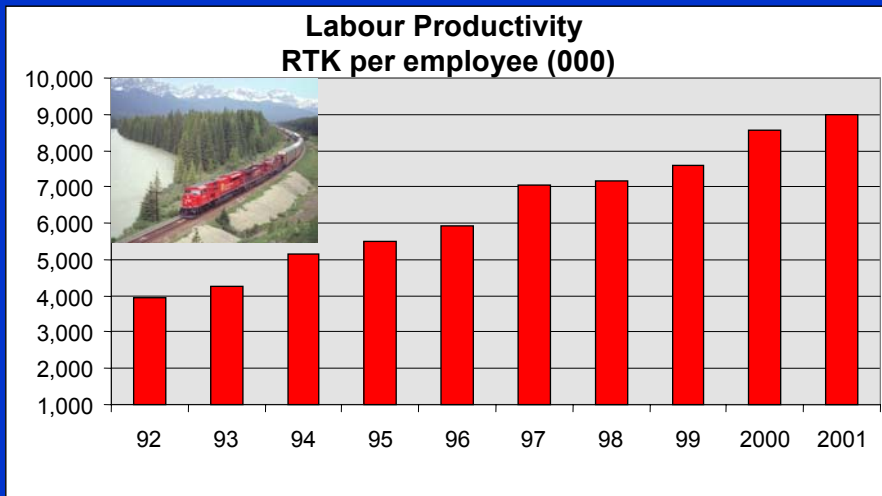
**Canada's productivity performance
was poor in the late 1990s ...**

1. COMPETITIVENESS (Cont'd)



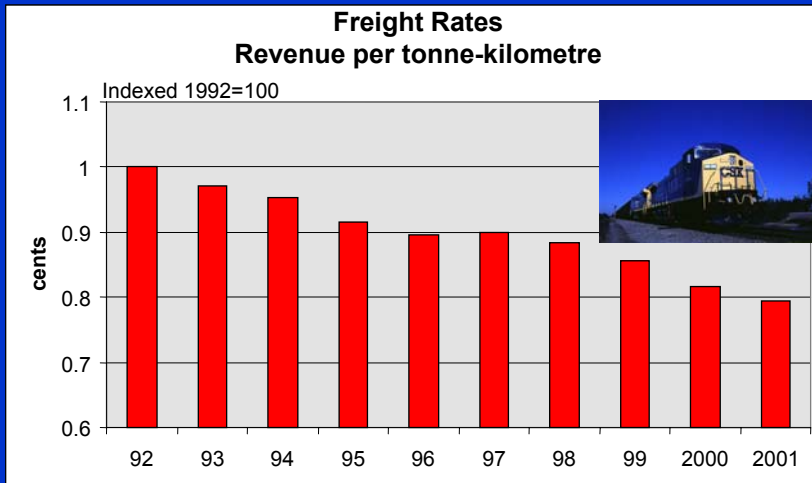
Federal freight subsidies have been eliminated

1. COMPETITIVENESS (Cont'd)



Since 1992 rail has improved productivity dramatically

1. COMPETITIVENESS (Cont'd)



Rates down 21% since 1992, 35% since 1987

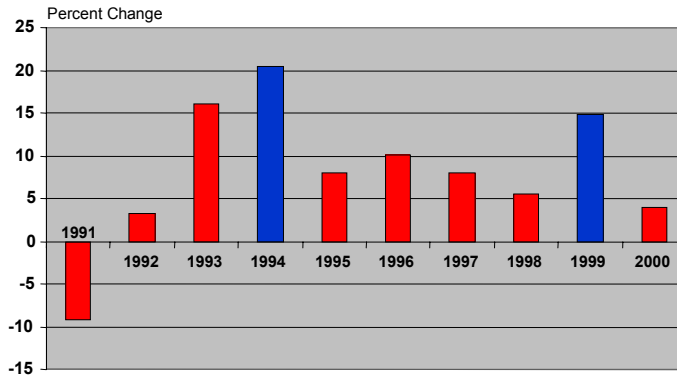
1. COMPETITIVENESS (Cont'd)

WHY RAIL IS BETTER?

- Rates are down
- Investment is up (all from private sources)
- Subsidies have been eliminated
- Key part of NAFTA economy with truck, Class 1 railways and short lines serving regions
- Rail helps communities be competitive

2. CONGESTION

GROWTH RATE IN FOR-HIRE TRUCK TRAFFIC



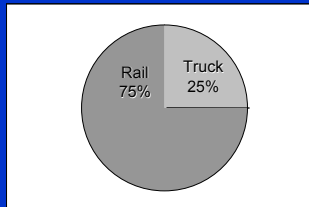
Source: Statistics Canada, Trucking in Canada, 2000

Inter-city trucking activity exploded in the 1990s, trucks cause 3.5 times the congestion of a car

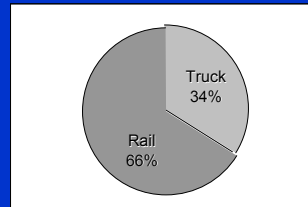
2. CONGESTION (Cont'd)

ACTIVITY SHARES IN TONNE-KMS

1990



2000



- Total freight activity (tonne-kms) 1990 to 2000 grew by 56%
- For-hire truck activity (tonne-kms) 1990 to 2000 grew by 112%
- and truck revenue (\$6.6 bil 1990 ... \$13.8 bil 2000) grew by 110%
- Rail activity (tonne-kms) 1990 to 2000 grew by 38%
- and Rail revenue (\$5.8 bil 1990 ... \$7.2 bil 2000) grew by 24%

Trucking has rapidly gained market share ... the majority of growth has been in intercity and NAFTA traffic

2. CONGESTION (Cont'd)

- It can be expected, unless policy is changed, that the trucking sector will grow 61% between 1995 and 2020
- This problem is particularly acute in the Quebec-Windsor Corridor, in the Lower Mainland of BC and at the borders
- Congestion reduces competitiveness and quality of life

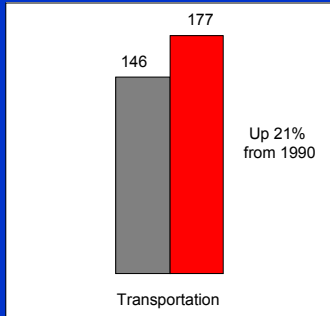
2. CONGESTION (Cont'd)

WHY RAIL IS BETTER?

- Rail has dedicated corridors
- Can handle more; growth vertical not horizontal
- One freight train can take 280 trucks off the road
- One passenger train takes up to 1000 cars off the road
- Capacity currently exists

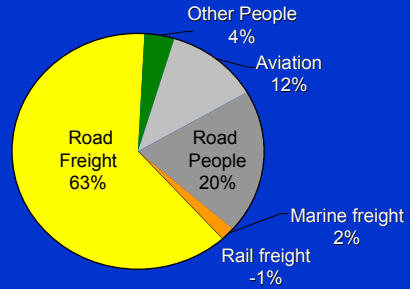
3. EMISSIONS

GHG Emissions in Transportation, 2000



SHARE OF CHANGE IN TRANSPORT GHG EMISSIONS

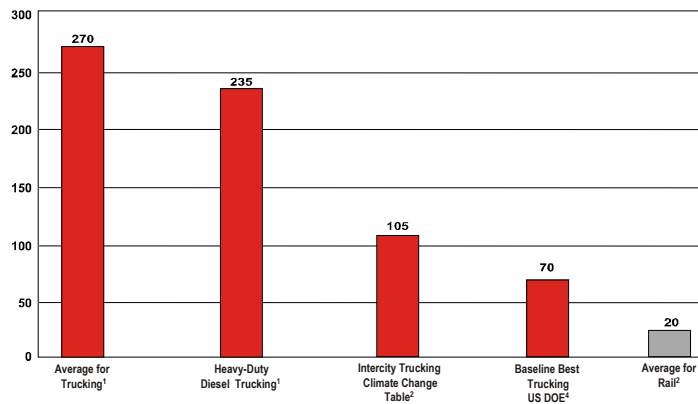
1990-2000, 26.4 megatonnes



The transportation sector is a major contributor to Canada's emission problems ... 2/3 of the growth is from heavy duty trucking

WHY IS RAIL BETTER?

GHG INTENSITY PER TONNE KILOMETRE CANADIAN FREIGHT MODES



Sources: 1. Environment Canada, Fact Sheet #3, January 2002

2. Transportation Climate Change Table Options Paper, 1998

3. Intermodal Freight Transportation Measures to Promote System Efficiency, Research Traffic Group, October 2000.

4. Lifecycle Analysis for Freight Transport, SAE Technical Paper Series # 982206, December 1998.

Rail has a much better GHG performance than trucking ... 1/5 that of inter-city trucks ...

4. COST TO GOV'T/SOCIETY

GOVERNMENT COSTS

- Governments in Canada currently spend \$12 billion on highways
- This amount is not sufficient to meet current needs, let alone future growth
- In the 1990's transportation costs have been downloaded to communities
- Significant cross subsidizing occurs
 - i.e. using property tax base to pay for transportation projects, especially true for communities
 - large municipalities specially GTA subsidizing Canadian exports from other provinces

4. COST TO GOV'T/SOCIETY (Cont'd)

WHY IS RAIL BETTER?

- The lowest incremental cost investment to increase transportation capacity is rail. This has been confirmed by a recent AASHTO report
- To quote: "The report finds that relatively small public investments in the nation's freight railroads can be leveraged into relatively large public benefits for the nation's highway infrastructure, highway users and freight shippers.

(AASHTO – American Association of State Highway and Transportation Officials)

4. COST TO GOV'T/SOCIETY (Cont'd)

SOCIETAL COSTS

- The societal costs (externalities) of the explosion in highway traffic dwarf direct payments.
 - They are:
 - Environmental degradation (air, water and land)
 - Health impacts (Exploding in Canada)
 - Accidents
- A recent OECD report estimated that under this business as usual scenario, externalities are \$1,728 per capita for every one of 273 million citizens of the nine countries studied. These costs are paid by governments and individuals regardless if they use the transportation system or not

4. COST TO GOV'T/SOCIETY (Cont'd)

WHY IS RAIL BETTER?

Air Quality

Type of Emissions	Ratio Truck/Rail
Particulate Matter (PM ²)	8 to 1
Volatile Organic components (VOC ³)	6 to 1
Carbon Monoxide (CO ⁴)	12 to 1
Oxides of Nitrogen (NOX ⁵)	5 to 1
Oxides of Sulfur (SOx ⁶)	2 to 1

Because of low friction related to steel on steel
rail is superior to truck for all emissions

5. LAND USE

- Currently, Toronto is 40 percent paved
- In Ontario, farmland continues to disappear at the rate of 7,500 acres per year
- Many larger communities have no room for new highways

5. LAND USE (Cont'd)

WHY IS RAIL BETTER?

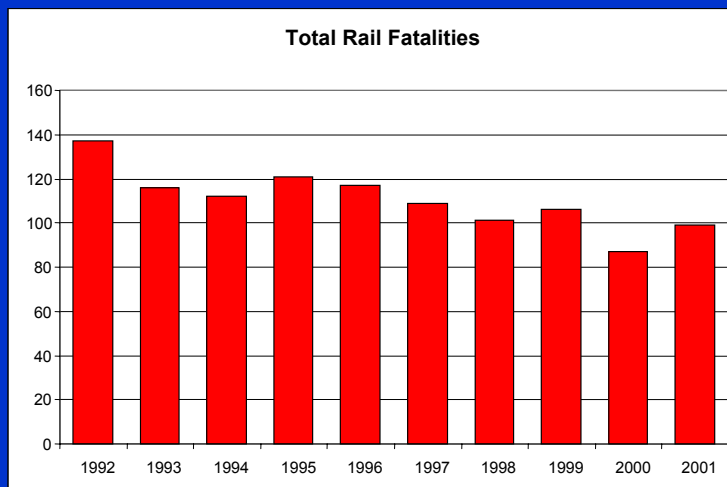
- Without GO Transit, Toronto would need 4 additional Don Valley Parkways (DVP) and 4 additional Queen Elizabeth Ways (QEW)
- Rail's footprint is 1/3 of highway's
- Fits well with higher density and clusters

6. WELL-BEING/SAFETY

- In 2000, rail related accidents and crossing fatalities were at the lowest levels in a decade
- The number of main line derailments has been cut in half since 1984
- By comparison, about 3,000 Canadians died in highway accidents last year
- Emergency room admissions for respiratory ailments increasing due to higher road traffic volumes

6. WELL-BEING/SAFETY (Cont'd)

WHY IS RAIL BETTER?



871 fatalities involving heavy trucks in (1998)
15,906 personal injury collisions with heavy trucks (1998)

WHAT WE NEED TO SOLVE TOGETHER?

- (a) **Proximity** (land use, well-being safety)
- (b) **Crossing congestion** (congestion)
- (c) **Urban corridors** (land use, congestion, cost to gov't/society)
 1. Grade separation
 2. Banking discontinued corridors
 3. Prime land in urban centers
- (d) **Rail capacity/linkages and intermodal** (competitiveness, congestion, emissions)
- (e) **Modal neutrality** (competitiveness, congestion, emissions)

A. PROXIMITY

- **Background**

- **Proximity concerns due to economic growth**
 - Growth of communities around railways
 - More dependence on rail - 24/7 operation
- **Both railways and communities contribute to “proximity” problems**
 - Urban planning / land development issues
 - Expansion / changes in rail operations
- **CTA ruled not to have jurisdiction over noise complaints**

A. PROXIMITY (Cont'd)

- **Accomplishments to date**
 - **Developing voluntary approaches with FCM / CAMA**
 - **Industry and RAC Board very supportive**
 - Class 1s, passenger and short lines
 - **Dispute resolution model evolving**
 - General framework agreement between RAC and FCM - 2002
 - Successful pilot projects in Brandon and BC communities (CPR), S.S. Marie (CN)
 - Pilots being planned in Banff, Vancouver

A. PROXIMITY (Cont'd)

- **Accomplishments to date**
 - **RAC / FCM Proximity video produced / distributed**
 - **Proximity Guidelines – components evolving:**
 - Noise guidelines (RAC Committee)
 - Land use guidelines (CN / CPR)
 - Trespassing guide (D2006)
 - Recreational trails (CPR)
 - **International models being evaluated (Queensland Rail)**

A. PROXIMITY (Cont'd)

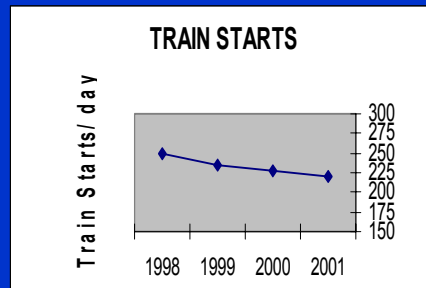
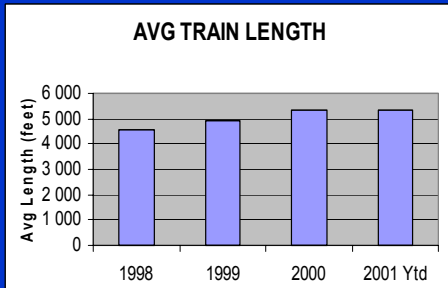
- **Proximity MOU between FCM & RAC**
 - Final agreement signed April 2003
 - First Steering Committee meeting – 8 July /03
 - Detailed program elements to be specified:
 - Priority deliverables and target dates
 - Responsibilities / accountabilities
 - Resources and funding
 - Communication & contact strategies
 - Proximity guideline development
 - Dispute resolution protocol
- “Local” issues / representation / solutions**

A. PROXIMITY (Cont'd)

- **Bill C-26: Impacts**
 - Legislation covers noise only
 - Complements intended MOU processes
 - CTA will only address noise complaints as a “last resort”
 - CTA will first require “due diligent” dispute management (as per MOU)
 - CTA Guidelines will focus on required proximity elements and principles – not detailed standards or thresholds
 - CTA would like connection to MOU working groups

B. CONGESTION CAUSED BY TRAINS

Long Trains – The Facts



Longer trains have resulted in fewer trains ...
best solution is grade separations ...

C. URBAN CORRIDORS

1. Grade Separations
2. Banking discontinued corridors
3. Prime lands in urban centres – moving rail to new locations

C. URBAN CORRIDORS (Cont'd)

1. Grade Separations

- RAC has compiled a list of the 48 most pressing grade separations in Canada.
- Criteria for inclusion:
 - Traffic density
 - Both highway/rail
 - Time of automobile/truck delay
 - Strategic importance
 - Safety

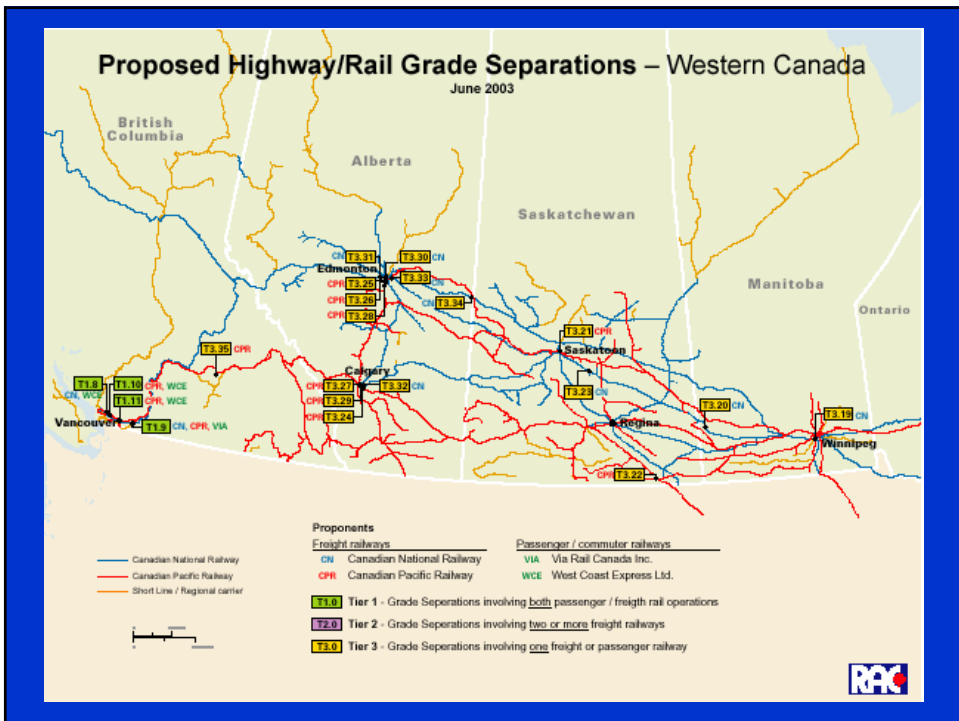
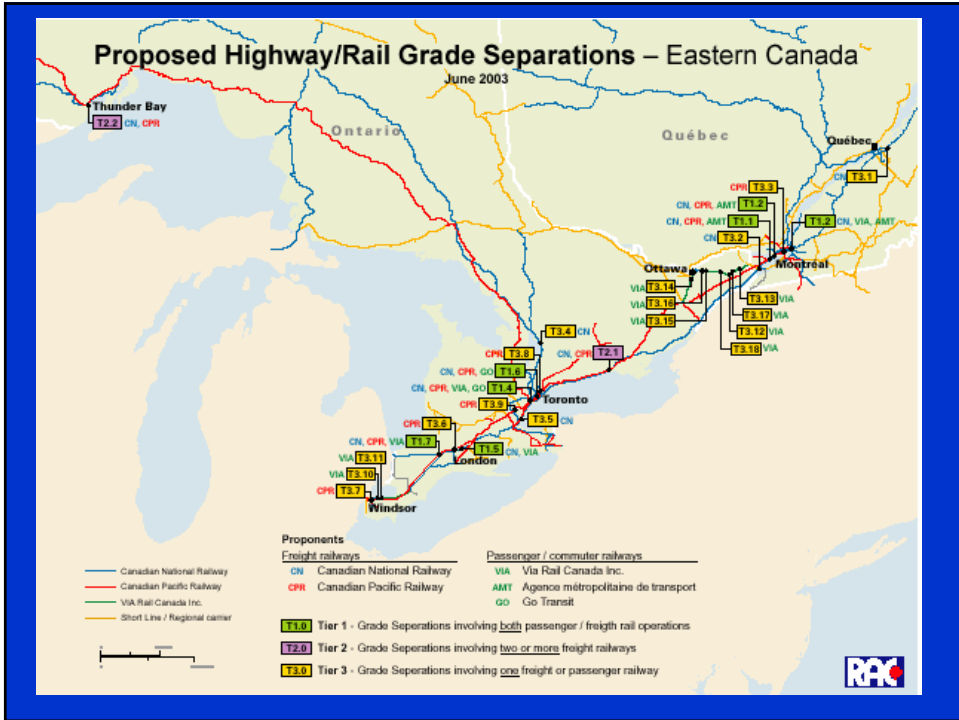
C. URBAN CORRIDORS (Cont'd)

1. Grade Separations

Funding:

- Class 1 railways recognize the importance of doing these grade separations. However, most of the benefits related to these projects are public.
- Hence, Class 1 financial participation is not an option that would be supported by shareholders.

**FUNDING SUPPORT BY FEDERAL AND PROVINCIAL
GOVERNMENTS NECESSARY**



C. URBAN CORRIDORS (Cont'd)

2. Banking Discontinued Corridors

- The cost of creating new rail corridors, especially in urban areas, is most often prohibitive
- The investment return to governments for protecting urban rail corridors is substantial given the potential savings in:
 - Infrastructure costs,
 - Reductions in highway congestion,
 - Lessened environmental impacts, and
 - Increased personal safety

C. URBAN CORRIDORS (Cont'd)

- Governments should selectively purchase discontinued urban rail corridors and hold these assets for future commuter use as urban populations grow

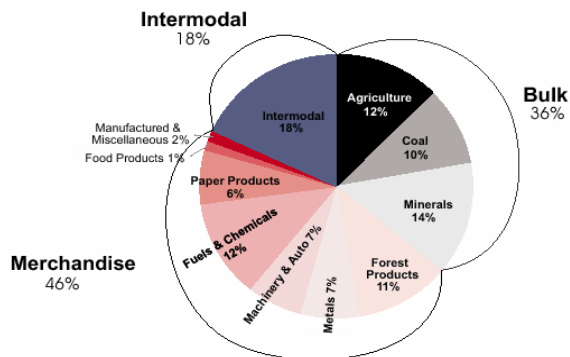
C. URBAN CORRIDORS (Cont'd)

3. Prime lands in urban centres – moving rail to new locations

- Railways have made a concerted effort, where it makes sense, to move operations from prime lands to better areas. Examples:
 - Winnipeg
 - Montreal
 - Vancouver
- In some cases, Government support (financial or otherwise) is needed to accomplish this goal

D. RAIL CAPACITY/REGIONAL LINKAGES AND INTERMODAL

ORIGINATED CARLOADS BY COMMODITY GROUPING
TOTAL - 2001



Source: RAC

Merchandise and intermodal account for almost 65% of business ...
bulk is 35% and declining ... **Railways now scheduled ...**
service, speed, reliability key

D. RAIL CAPACITY/REGIONAL LINKAGES AND INTERMODAL

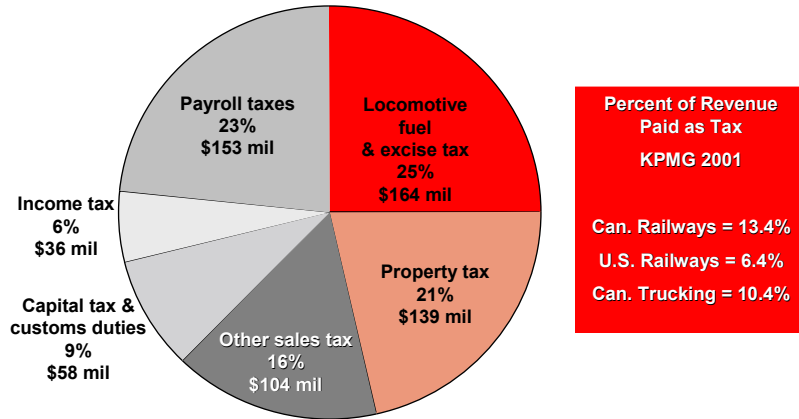
- More intermodal yards needed, e.g. transloads for short lines
- Some bottlenecks exist (prime for private public partnerships)
 - Cascade Corridor
 - Detroit River Tunnel Partnership
 - More extensive research into best investment required (AASHTO like research needed)
- Short lines need infrastructure support for line rehabilitation and heavier car loading standards, critical to maintain linkages to regions
- Need to move from asphalt to steel
- Communities need to make land available and budget support of citizens

D. RAIL CAPACITY/REGIONAL LINKAGES AND INTERMODAL



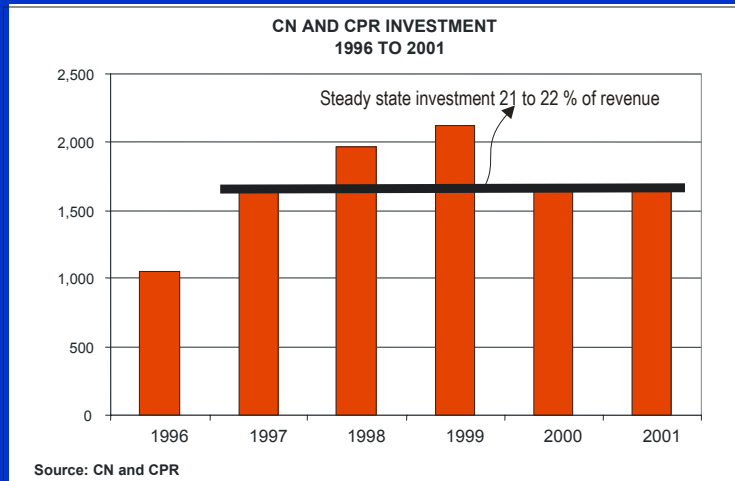
E. MODAL NEUTRALITY

Taxes Paid by Railways - 2001



Railways paid \$654 million in taxes in 2001

E. MODAL NEUTRALITY (Cont'd)



The AASHTO estimates that, in 2000, N.A. railways earned a return on investment of 6% ...well below their cost of capital of 10% ...

E. MODAL NEUTRALITY (Cont'd)

Challenges remain:

- **Increases in truck size and weights, varied across Canada**
- **Lack of modal neutrality in:**
 - Tax policy
 - User pay (no full cost accounting for roads)
 - Safety and operation oversight and regulation
- **Lack of real initiatives to foster intermodal/multi-modal**
 - Land use/planning
 - Standards and equipment harmonization
 - Incentives
 - Infrastructure (intermodal/multi-modal/286,000)

IN SUMMARY

- **Rail (freight and passenger) can solve some of your key challenges**
 - Competitiveness
 - Congestion
 - Emissions
 - Cost to government/society
 - Land use
 - Well-being/safety
- **Choose the RAC 20/20 vision**

IN SUMMARY (Cont'd)

- **Interface between rail and communities can improve by working together:**
 - **Proximity**
 - **Corridors**
 - **Grade separations**
- **We have developed a good working relationship**
- **We can make Canada a model other countries will envy**