Switching Yesterday's Rails for Tomorrow's Cities

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by Brian Klotz

It was a bold idea to build an all-Canadian railroad system; economics, geography and a great many people as well said it couldn't be done. Yet, through the sweat of immigrant workers, dynamic administrators and ingenious designers, the railways were built and in the process forged Canada into a nation.

The railroad opened up the Canadian Prairies, carrying thousands of new settlers to quarter section farms and transporting back their wheat to the growing markets of the East. Many of our towns and cities were spawned by railway depots, and our present-day economies of industry and agriculture still rely heavily upon the railway networks for the transportation of both finished and raw material.

However, the passing of time has radically changed our forms and ways of life. The arrival of the motor age, the mushrooming growth of our urban areas, and the increase in environmental awareness have placed numerous existing railroad facilities in potential or real conflict with the attainment of urban development goals, both physical and social.

In June of 1974, as a catalyst for municipal or provincial action to develop and implement plans to adjust railroad facilities to the needs of contemporary urban communities, the federal government enacted the Railway Relocation and Crossing Act. The implications of this Act on future urban development are many and diverse, encompassing a broad spectrum of planning concerns such as transportation, land use, neighbourhood structure and environmental concerns, to name a few.

The ways of using the inner-city land released by relocating or rerouting railroad lines are endless, and the oncein-a-century opportunity for Canadian cities to restructure and improve the quality of our urban life is unparalleled.



Transportation

The modern Canadian city is laced by complex transportation networks of superhighways and residential roads.

The development of such new urban transportation routes have often resulted in a direct conflict between existing railway facilities and efficient urban transportation patterns.

For example, particularly at peak congestion hours, grade-level crossings on major urban arterial roads frequently aggravate efficient traffic flow and can be responsible for critical delays of emergency vehicles.

Under the various sections of the Act, federal assistance continues to be available to subsidize, at increased levels, the cost of constructing grade separations. Railway companies may be required to regulate the class of rail traffic on certain lines or portions thereof, to reduce conflicts with vehicular traffic in urban areas. Alternatively, plans of relocation of railway lines may be accepted and implemented, which may result in the elimination of existing grade-level crossings in critical areas.

Where several rail lines of one or more railroad companies cross major arteries and impede traffic flow, the number of crossings may be reduced by either concentrating the rail lines in one location, or by requiring separate railroad companies to share one right-ofway or perhaps to share their rights-ofway. From an urban transit standpoint, the relocation or rerouting of railways opens up a variety of transportation options.

Railway companies may be required to share their lines or rightsof-way with other transportation modes such as public or rapid transit reducing the cost or disruption of providing a separate right-of-way. Corridors which are released as a result of railway relocation or consolidation may provide rights-of-way for public transit routes, as well as for new or widened roadways.

Accessibility may be vastly improved across railway corridors vacated through relocation such as travel be-

The Railway Relocation and Crossing Act

The Railway Relocation and Crossing Act became law on June 1, 1974. Part 1 of the Act makes it possible for municipalities and provinces to initiate action where railway relocation or rerouting can open the way to improvements in urban areas.

Part 1 of the Act provides for:

- financial assistance to municipalities or provinces of up to 50 percent of the cost of preparing urban development plans and transportation plans;
- grants of up to 50 percent of the net costs of railway relocation;
- orders to relocate railway facilities and reroute traffic;
- the acquisition of vacated railway lands by the federal government if necessary.

The other parts of the Act provide for an expansion of the Railway Grade Crossing Fund, which has helped improve rail safety and security in urban and rural areas of Canada for more than 60 years. Federal financial assistance provided through the Fund has been

Development

Land freed by the relocation of railway lines and yards can be developed for a variety of uses consistent with the growth and land use strategies of the municipality. This is particularly advantageous in fully developed areas where the development demand is high but vacant land is at a premium.

Released railway lands may be utilized for the expansion of commercial and office development of a growing Central Business District. Housing projects may be developed to upgrade local neighbourhoods or provide gearedto-income shelter or accommodation for senior citizens.

Local areas deficient in open space may be provided with parks, playfields or plazas. Major institutions, cultural or more than doubled and new special assistance has been provided for large scale projects to meet increasing costs and new situations. This assistance may, in certain cases, be used in conjunction with railway relocation and rerouting projects.

Planning documents

Three basic planning documents are required:

- an urban development plan
- a transportation plan
- a financial plan

The urban development plan covers the proposed development of the urban area. It describes the problems the relocation would solve and the improvements that would result, how the plan would be implemented, the schedule, the costs and financing, and the commitments of the various parties.

The transportation plan covers all the transportation implications of the relocation or rerouting. It describes the overall transportation scheme which would result, including railway lines, streets, highways, bridges, bus routes,

sport facilities could be developed, including hospitals, colleges, museums, libraries, stadia, convention centres or exhibition grounds.

In addition to the development prospects of the released land itself, a relocation will in most instances generate a higher level of private investment in either redevelopment or rehabilitation in the surrounding areas.

The planning and establishment of a relocated line on the urban fringe could give strong impetus to new "suburban" industrial parks. This may contribute substantially to the achievement of the industrial development policies of a municipality and effect a better balance of employment distribution. Such a development could be

tween neighbourhoods, to and from waterfronts, or to and from downtown areas.

The opportunities and assistance provided by the Act will allow planners more flexibility in the design and layout of such major transportation improvements as expressway networks and airport expansions, where existing railways are constraining factors. For the railroads, themselves, there may be considerable operational savings involved in the relocation or rerouting of their facilities.

This 1928 photograph shows Regina's CPR station built in 1892. Photo: Public Archives of Canada.

airports and wharves. It identifies specific projects, the implementation program and schedule, and the costs and financing.

The financial plan summarizes the costs and financing from the transportation plan, cost sharing, the relocation grant requested and other financial information. In particular, it provides figures that would make it possible for the CTC to determine the net costs of railway relocation – the basis of the railway relocation grant.

Agencies involved

Three federal agencies share the responsibility for administering the Railway Relocation and Rerouting Program. They are:

• The Ministry of State for Urban Affairs

• The Ministry of Transport

• The Canadian Transport Commission The Department of Public Works may be required to acquire land in certain circumstances.

The Program will be carried out in cooperation with the provinces. Thus provincial agencies will also be involved.

coupled with the encouragement of gradual relocation of nonconforming industries from the city centre.

The Wrong Side of the Tracks

With population continuing to concentrate in towns and cities, the urban neighbourhood plays an increasingly important role in the maintenance of community life. The removal of railway barriers and the release of inner city lands could have a significant impact on the creation or redefinition of urban neighbourhoods.

The relocation of a railway line may result in the better grouping of neighbourhoods, as well as provide for a more efficient use of both existing and proposed community facilities. School area boundaries could be adjusted to reduce walking distances or to balance enrollment levels and fluctuations. The effective service areas of public clinics, branch libraries, recreation centres and other social services could be expanded, with a corresponding decrease in the demand for new facilities in previously isolated areas. As well, convenience shopping and commercial services may be shared.

Community identity and enthusiasm may be heightened, culminating in a greater incidence of public involvement in structured or informal social activities and programmes in a redefined neighbourhood. Desirable social-economic integrations may be achieved, dispelling any "wrong-side-of-the-tracks" syndromes.

New places of social gathering and interaction could be provided in the design and development of released lands, ranging from neighbourhood parkettes to downtown plazas and pedestrian malls, and including the construction of new places of assembly for cultural, sports or entertainment events.

It is hoped that public participation in the formulation of plans for a railway relocation project will also bring to light



Railroad levelling through the wheat fields of the Canadian Prairies (circa 1905). Photo: Public Archives of Canada.



The proximity of the CP Rail yards to Regina's downtown business core is seen here. The release of this land will give Regina a unique opportunity to redevelop its downtown area.



additional social concerns and problems, solutions to which may be successfully incorporated into the implementation of an Urban Development Plan, following railroad relocation.

Environment

Hand in glove with the implications for development are those for environmental improvement. The elimination or diminution of unsightly railway installations with their attendant generation of noise and pollution from a given locality represents a major benefit in itself. Architectural design and landscaping will be major factors influencing the degree of ultimate aesthetic appeal as well as integration with the type, scale and function of surrounding development.

Released rights-of-way may be transformed into open space links, walkways and bicycle paths, which not only enhance the visual environment, but provide a safer environment through the separation of pedestrians and cyclists from traffic routes. Some alignments may lend themselves towards use as buffer strips between conflicting areas of existing land use.

Railway lines which traverse unique topographical features, scenic landforms or ecological reserves within or near an urban area may be returned to their original natural state, for passive or recreational enjoyment (e.g. river banks, waterfronts, escarpment faces, marshes and conservation areas).

Where relocation is not feasible, cutbacks in the volume of rail traffic over environmentally sensitive lines may be achieved through rerouting.

Overview

The implications outlined above are by no means an exhaustive list of the benefits available from railway relocation and rerouting. It does, however, give an insight into the large scope and potential impact of the Railway Relocation and Crossing Act on future urban planning and development. The CP Rail line running through the centre of Regina will be relocated around the circumference of the city.



While it is directly addressed to one mode of transportation, the principal benefit of the legislation is the opportunity it provides for new directions in the urban environment and its development.

Particularly in cases where large land areas are likely to be released, railway relocation will provide municipalities with a new and perhaps unparalleled choice of urban growth and development strategies, previously unavailable or unconsidered. The fundamental options which may be generated include:

- improved efficiency and integration of all transportation modes
- the strengthening and expansion of the business core
- the capacity to absorb and house population growth
- concentration of development in the inner city, as opposed to decentralization or urban sprawl, and
- balance in the distribution or integration of housing and job locations.

The exercise of these options may have significant ramifications on the demand for new physical infrastructures (transportation, municipal services), new community resources (schools, parks, shopping centres), or the preservation of urban assets (stable neighbourhoods, greenbelts, surrounding farmlands).

As to the implications on the railroad companies themselves, the Act provides that in principle they may neither gain nor lose as a result of any relocation project. The responsibility for monitoring and adjudicating this provision rests with the Canadian Transport Commission, which will determine financial liabilities and appropriate compensation.

All Aboard

The first municipal project to receive federal funding for the preparation of an urban development plan is the City of Regina. Regina proposes to relocate the bisecting mainline of the CPR around

the circumference of its urban area. In the process, about 40 acres of railway yard will be released, immediately adjacent to the downtown core. An international design competition will be held to explore innovative approaches for the development of the released lands.

A \$160,000 railway relocation study is also underway in Red Deer, Alberta. This study will investigate the relocation of the Edmonton/Calgary CPR rail line to the west of the City, removal of the downtown CPR rail yards and the establishment of new yards on the relocated main line.

The Red Deer relocation study is the first in Alberta, although agreements for programs in Lethbridge, Edmonton and Grande Prairie are expected soon.

A \$200,000 railway relocation study is underway in Kamloops, B.C. The City proposes to relocate the yard facilities of both the CPR and CNR from its downtown area. The released lands will form part of a land assembly to accommodate a civic and cultural centre, as well as mixed commercial, residential and park development, strategically located to unify the downtown area with a waterfront setting along the North Thompson River.

Dozens of other municipalities across Canada have expressed interest in the programme and have held discussions with the Ministry of State for Urban Affairs, the Ministry of Transport and the Canadian Transport Commission on how to proceed. Several are now preparing detailed submissions for study funds. As well, working relationships with almost all the provinces have been established.

This increasing volume of interest and planning is perhaps the most meaningful measure of the extent to which the Act represents a timely response to urban problems and aspirations. □

FOOTNOTE

A top prize of \$25,000 in Regina's International Urban Development Competition has been awarded to Claire and Michel Duplay of Paris, France for their design scheme that may shape the future look of downtown Regina.

An international Jury chose this concept as outstanding among the five finalists who were competing in the second stage of the Regina competition. The competition was launched by Regina just over a year ago to seek out imaginative yet practical ideas for re-use of 114 acres of prime urban land that may be vacated by relocation of CPR rail lines and marshalling yards.