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# Canadian Pacific The Golden Years 1899-1914

LUNCH AND LEARN PRESENTATION 6

BY PAUL CLEGG

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# Agenda

- Shaughnessy
- What caused the “Golden Years?”
- Re-building and Expanding the Network
- Land/Crops/Irrigation
- Liberal Railway Policy, Competition and Regulation
- Mechanical Department Advances
- Subsidiaries
- Conclusions

# The Golden Years - AKA the Shaughnessy years

- Thomas Shaughnessy b 1853 Milwaukee WI, d 1923, Montreal Quebec
- Son of Irish Immigrants
- Started at the Milwaukee Road as a teenager, eventually rose to Purchasing Agent
  - Also involved in Milwaukee politics and law
- Van Horne brought Shaughnessy to CP in 1882
  - Shaughnessy started as Purchasing Agent for CPR
  - Distinguished himself as a meticulous administrator
  - Rose gradually to Assistant President and Vice President under Van Horne
- President of CPR 1899 – 1918
  - Known for conservative financial policies
  - Made Van Horne's vision "work"
  - Knighted in 1901, elevated to the peerage in 1916 as Baron Shaughnessy

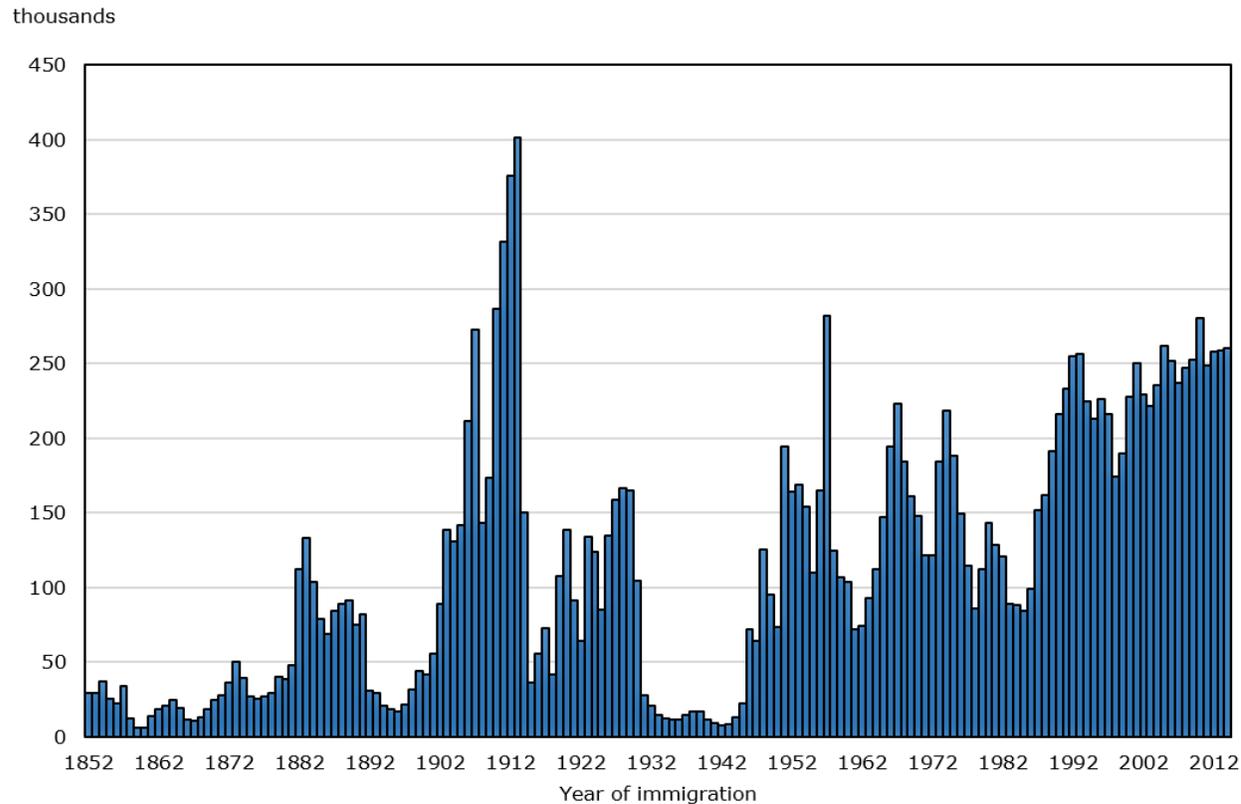


## Why the “Golden Years”?

- Unprecedented period of traffic growth and financial prosperity
- Driven by all time record immigration
  - Land sales
  - Agricultural production
- Initially very limited rail competition and regulation
- Railways were the tech titans of the period – major technological advances and productivity
  - Railway improvement and expansion
  - CP was at the leading edge of many advances
- Entrepreneurial investment in new and expanded subsidiaries

# All Time Record Immigration by 1912. . .

**Chart 1**  
**Number of immigrants who landed annually in Canada, 1852 to 2014**

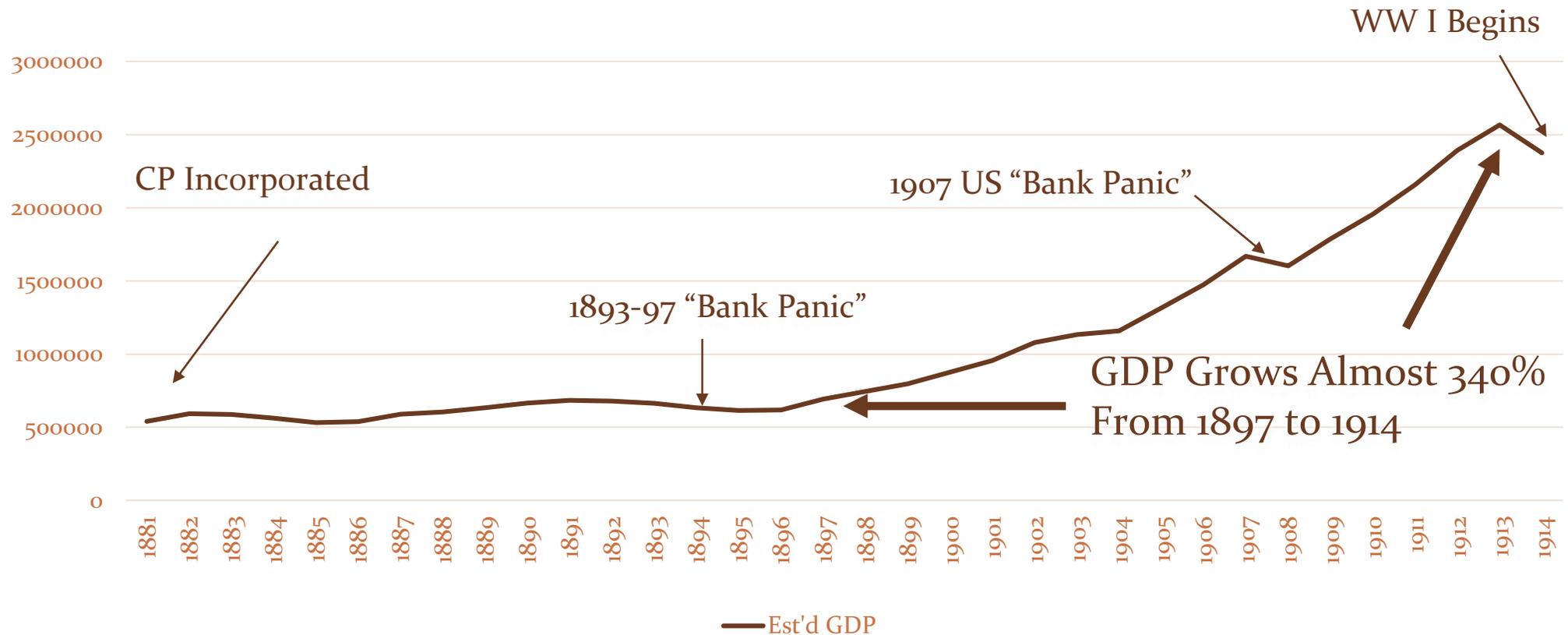


Per capita, 1912 immigration would be roughly the equivalent of over 2M immigrants in 2019

**Sources:** From 1852 to 1979—Employment and Immigration Canada, 1982. For 1980—Immigration Statistics, Immigration and Demographic Policy Group, Catalogue no. MP22-1/1980. From 1980 to 2014—Immigration Refugees Citizenship Canada.

# GDP rose due to Population Growth:

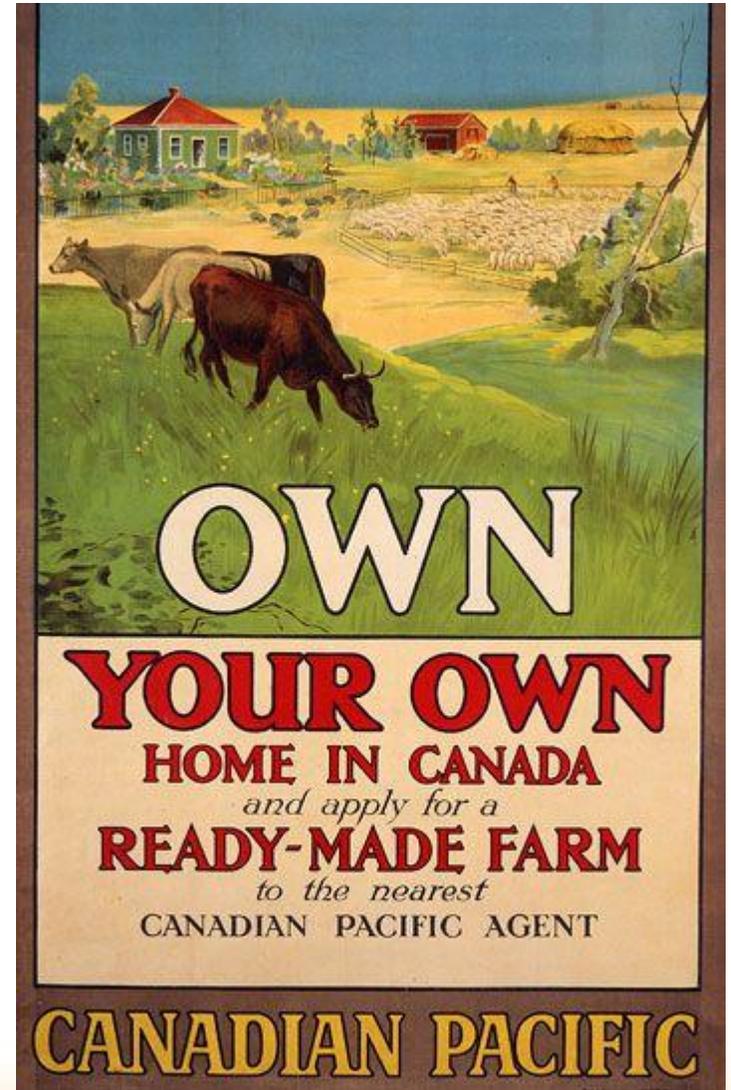
## Estimated Canadian GDP



Source: New Estimates of Gross National Product 1870-1926: Some Implications for Canadian Development; M.C. Urquhart

# CP Benefitted Greatly from Immigration

- Majority of immigrants went to W. Canada
- Internal migration as well to Western Canada
- CP dominated transportation in the west:
  - Moving settlers and settlers' effects
  - Booming agricultural production
  - Boom in urban development as well
- Sale of CP land & royalties from land
- CP's ships move immigrants
- Industry expands to serve new population
  - New and expanded CP subsidiaries due to population growth and industrial development



# Don't forget the Soo Line. . .

- CP a majority owner of Soo shares almost since inception
- The US rail and land boom largely occurred in the 1890s
- US Progressive movement 1900-1920s – anti rail, limits profits after 1900
- Soo Line was a major feeder though to CP
  - US Immigrants
  - Industrial imports and Canadian exports
  - Overhead business
- Competitive counter to GN/Jim Hill

A vintage recruitment poster for the Soo Line. The top section features the text "40,000 MEN NEEDED in WESTERN CANADA To Harvest 100,000,000 BUSHELS OF GRAIN" in red and black. Below this is a central illustration of a man in a hat and overalls on the left, and a man in a military-style uniform on the right, standing on a rocky outcrop overlooking a river valley. The valley contains a bridge and several towns labeled: Duluth, Superior, Minneapolis, St. Paul, Winnipeg, Regina, Portage, Calgary, and Edmonton. The bottom section of the poster lists travel routes: "ST PAUL-MINNEAPOLIS to DULUTH, SUPERIOR" and "ESTEVAN WEYBURN MOOSE JAW" with a price of "\$12.00". It also specifies "TUESDAYS, THURSDAYS and SATURDAYS" and "Good Going Only August 10, 12, 15, 17, 19, 22, 24, 26, 29, 31, 1911". The Soo Line logo is present in the corners.

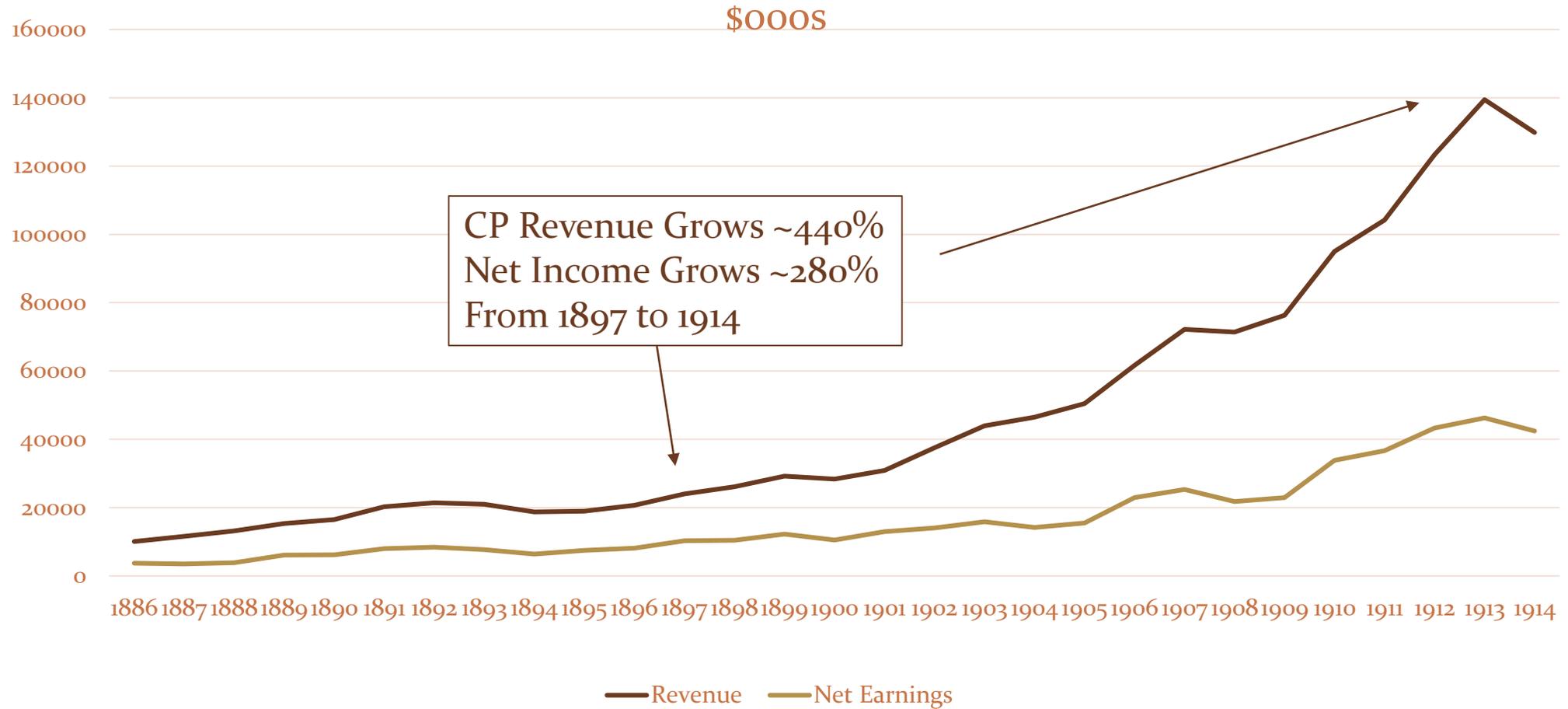
40,000 MEN NEEDED in 40,000  
WESTERN CANADA  
To Harvest 100,000,000 BUSHELS OF GRAIN

DULUTH SUPERIOR MINNEAPOLIS ST. PAUL WYNNIPEG  
CALGARY EDMONTON REGINA PORTAGE

ST PAUL-MINNEAPOLIS to DULUTH, SUPERIOR  
ESTEVAN WEYBURN MOOSE JAW \$12.00

TUESDAYS, THURSDAYS and SATURDAYS  
Good Going Only August 10, 12, 15, 17, 19, 22, 24, 26, 29, 31, 1911

# CP Revenues and Net Earnings (Income)

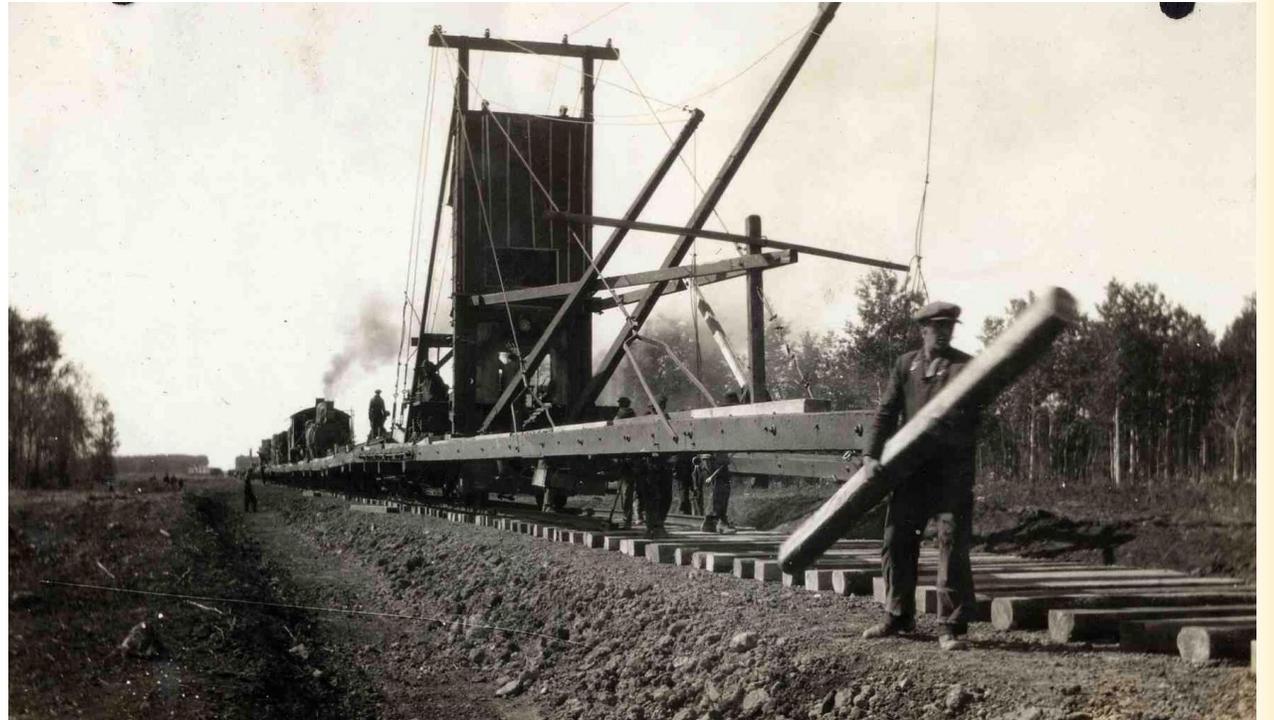


## Shaughnessy's Strategy is Conservative:

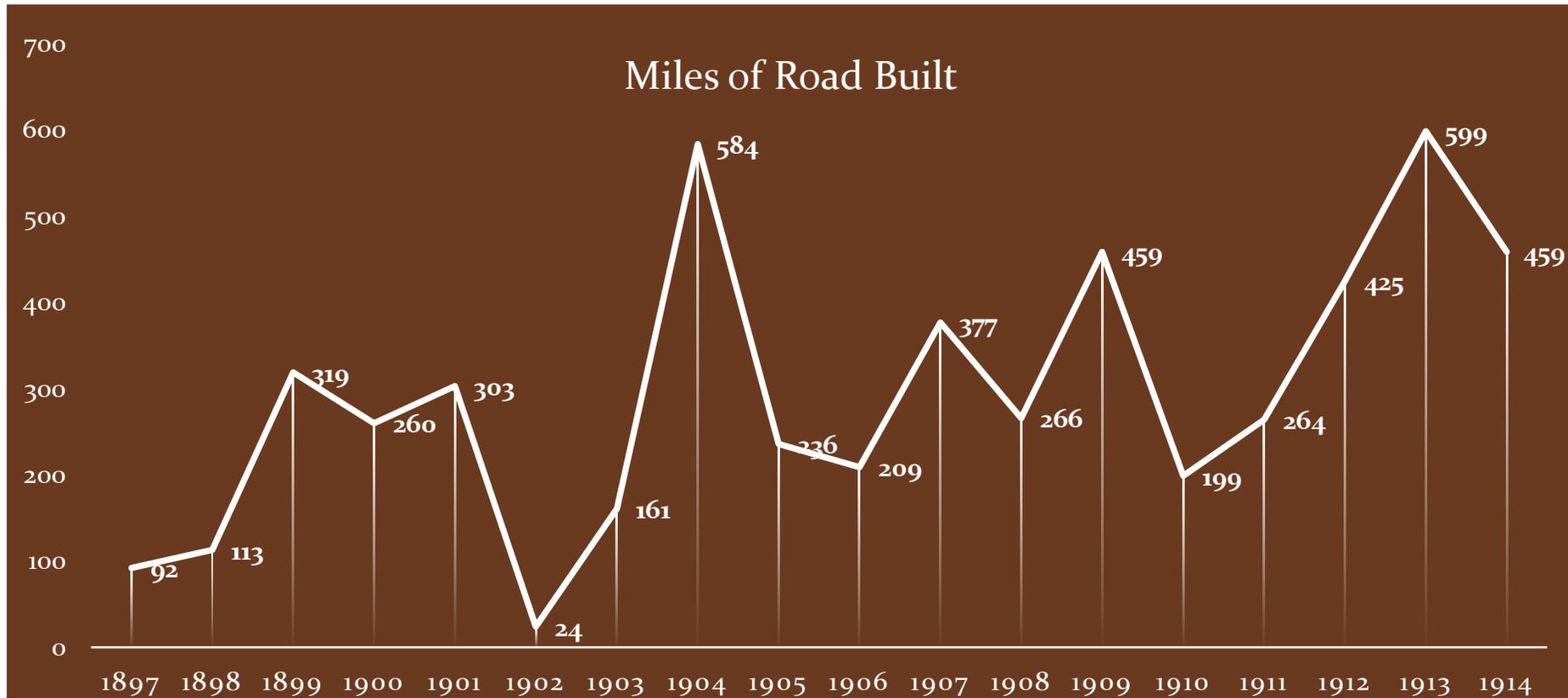
- Pay down debt
- Invest using funds from share sales and retained earnings
- Complete Southern BC route to Midway started under Van Horne
- Productivity improvements (mainline rebuilding)
- Major growth initiatives follow

# New line construction in west to access new markets:

- Southern BC mining boom
  - Coal in Crowsnest Pass
  - Lead, zinc, copper, silver & gold further west
- Prairies – grain production followed immigration
  - Rapidly growing production
  - 10-15 miles required a full day for a horse & wagon



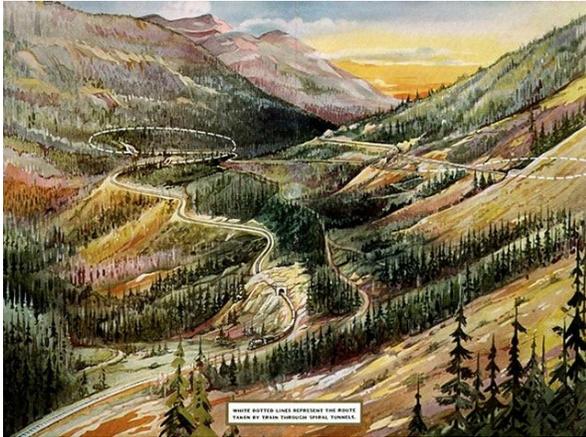
New Line Construction was a constant but peaked in 1913. . .



## After Southern BC, mainline improvements included:

- Ruling grades reduced from 1% uncompensated to 0.4% compensated on many lines east of BC – substantial realignment in many cases
- “Big Hill” ruling grade reduced from 4.4% to 2.2% and Connaught Tunnel
- Bridges improved – 1905 and 1908 specifications
- Beginning of planned double track Romford (Sudbury) to Vancouver
- Some Major Eastern Projects
  - Toronto – Romford (Sudbury)
  - Toronto – Montreal (& Ottawa) second route/double track

# Iconic western projects:



Spiral Tunnels 1909



Lethbridge Viaduct 1909

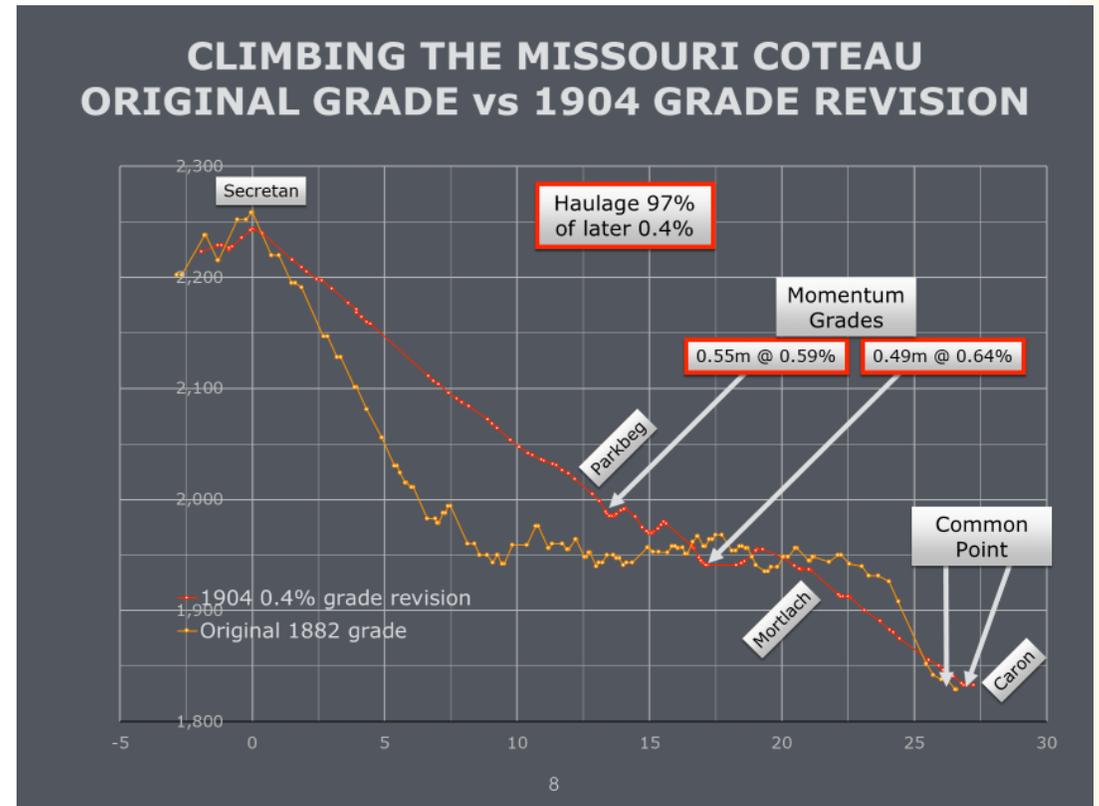
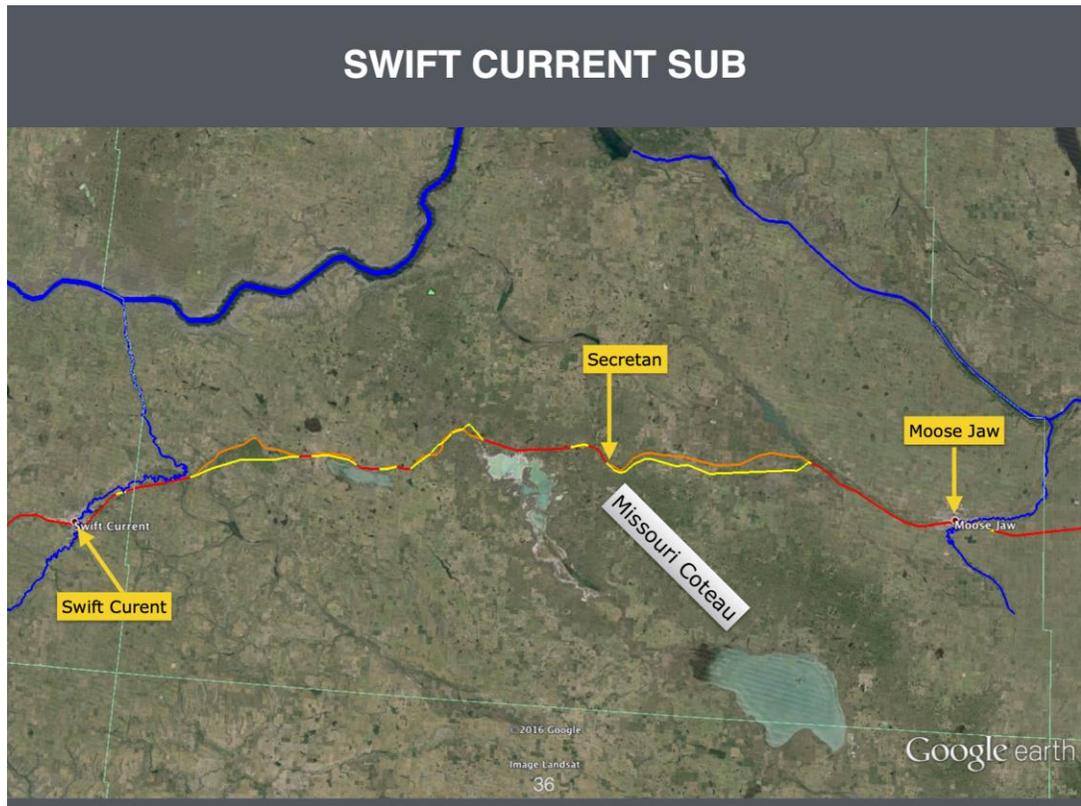


Bergen Cutoff/North Transcona Yard 1914



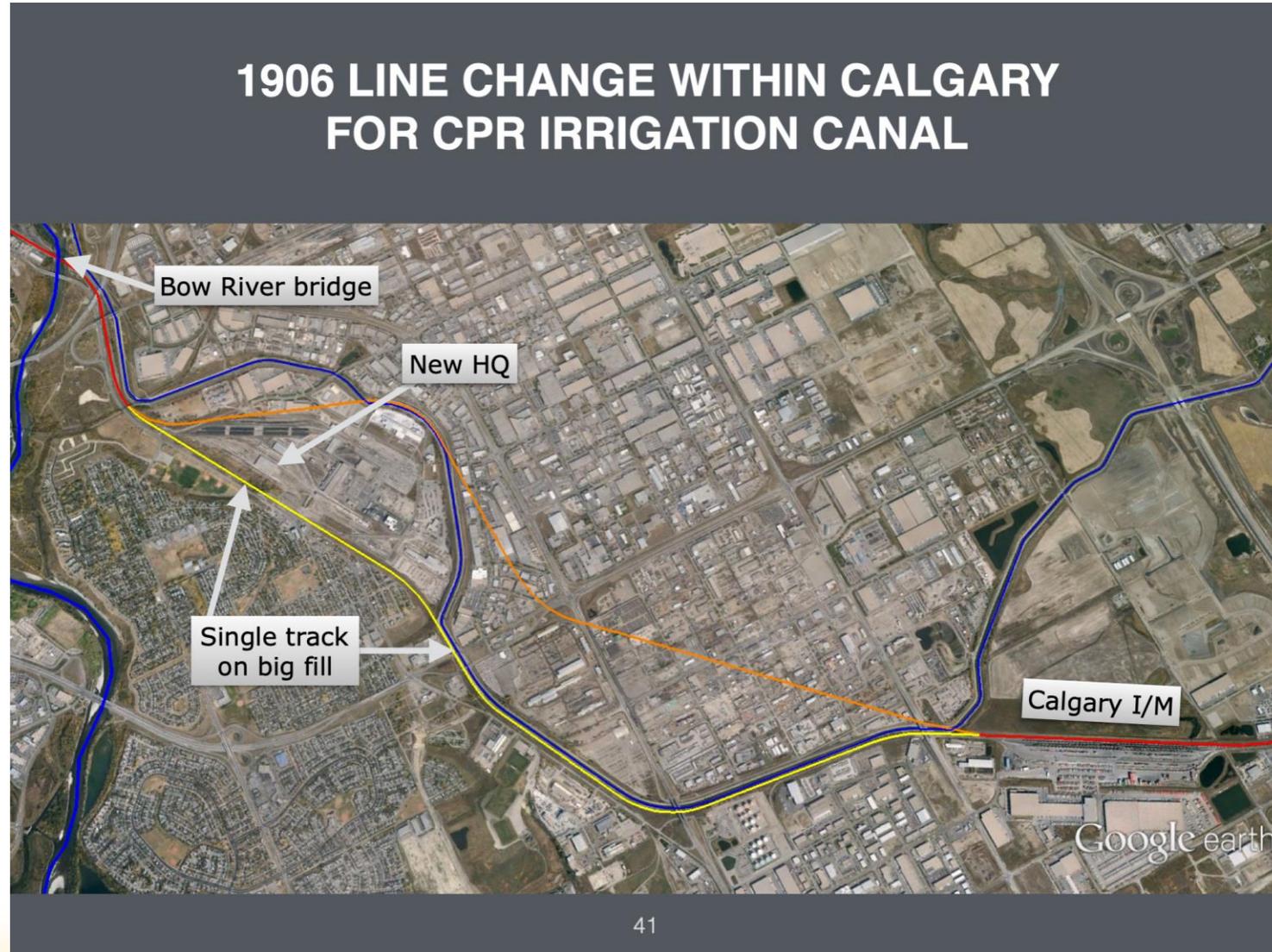
Connaught Tunnel 1916

Probably the biggest track project was improving the mainline such as this 1904 grade revision:



~ 50% of Swift Current Subdivision rebuilt on new alignment

# Calgary line change allowed for the western irrigation district :



# CP's Irrigation Program:

- CP used experience of southern Alberta irrigation program on a shortline CP had acquired
- Allowed sale of land that was otherwise unfit for field crops
- World's largest irrigation project until the Aswan High Dam in 1970
- Increased grain production for CP movement
- Three districts western, central and eastern



**READY MADE FARMS  
IN WESTERN CANADA**



GET YOUR HOME IN CANADA  
FROM THE  
**CANADIAN PACIFIC**  
SPECIAL FARMS ON VIRGIN SOIL  
NEAR THE RAILWAY  
AND CLOSE TO SCHOOLS, MARKETS, CHURCHES &c.  
ARE PREPARED EACH YEAR FOR  
BRITISH FARMERS OF MODERATE CAPITAL  
PAYMENTS IN EASY INSTALMENTS

FOR FURTHER PARTICULARS APPLY: —

# Land grants begat CP's oil & gas development

- CP's prairie land grants included mineral rights
  - Originally, CP retained rights for ballast when selling lands
  - Later rights for ballast and coal were retained
  - By 1905, all mineral rights were retained
- Alberta was the last province to see major CP land sales – CP retained most mineral rights in Alberta
  - Turner Valley development was on CP mineral rights
  - Ultimately led to the formation of PanCanadian Petroleum
  - Now Encana and Cenovus

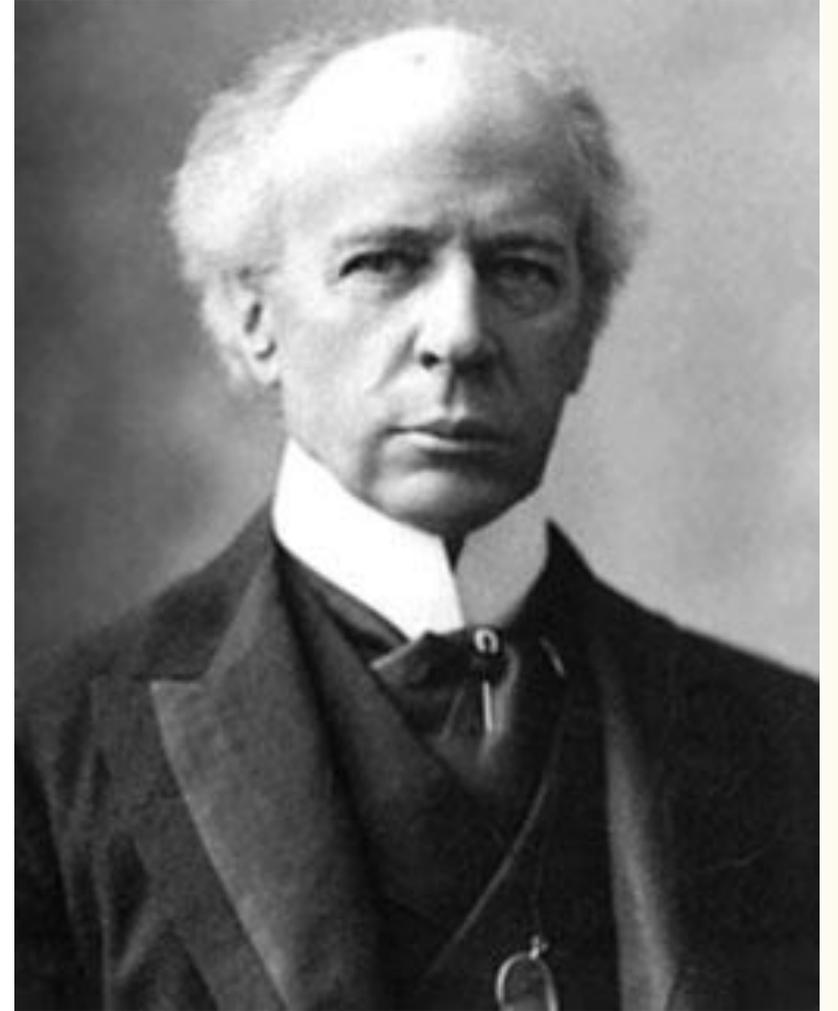
# New agricultural production throughout the prairies:

- Grain production soared:
  - Immigrants/new farms
  - Marquis variety 1909
  - Virgin soil
- CP's conservative investment strategy results in transportation shortages
- CP also had inexperienced western management prior to 1903
- Farmers want to market entire crop immediately after harvest
- Results in huge transportation backlog some years
  - Beginning of farmer unrest with rail service



# Liberal Railway Policy

- CPR associated with MacDonald's Conservatives
- Liberal Party under Laurier elected 1896
- Liberals need their own railway policy
  - Grain backlog, US immigration and monopoly clause create western demands for competition
  - Irrational exuberance – Canada's Century
  - Need to differentiate from Conservatives
- Resulting support for three new railways – CNor, GTP and NTR
- Government forms Board of Railway Commissioners (BRC) in 1904 to replace Parliament's Railway Committee



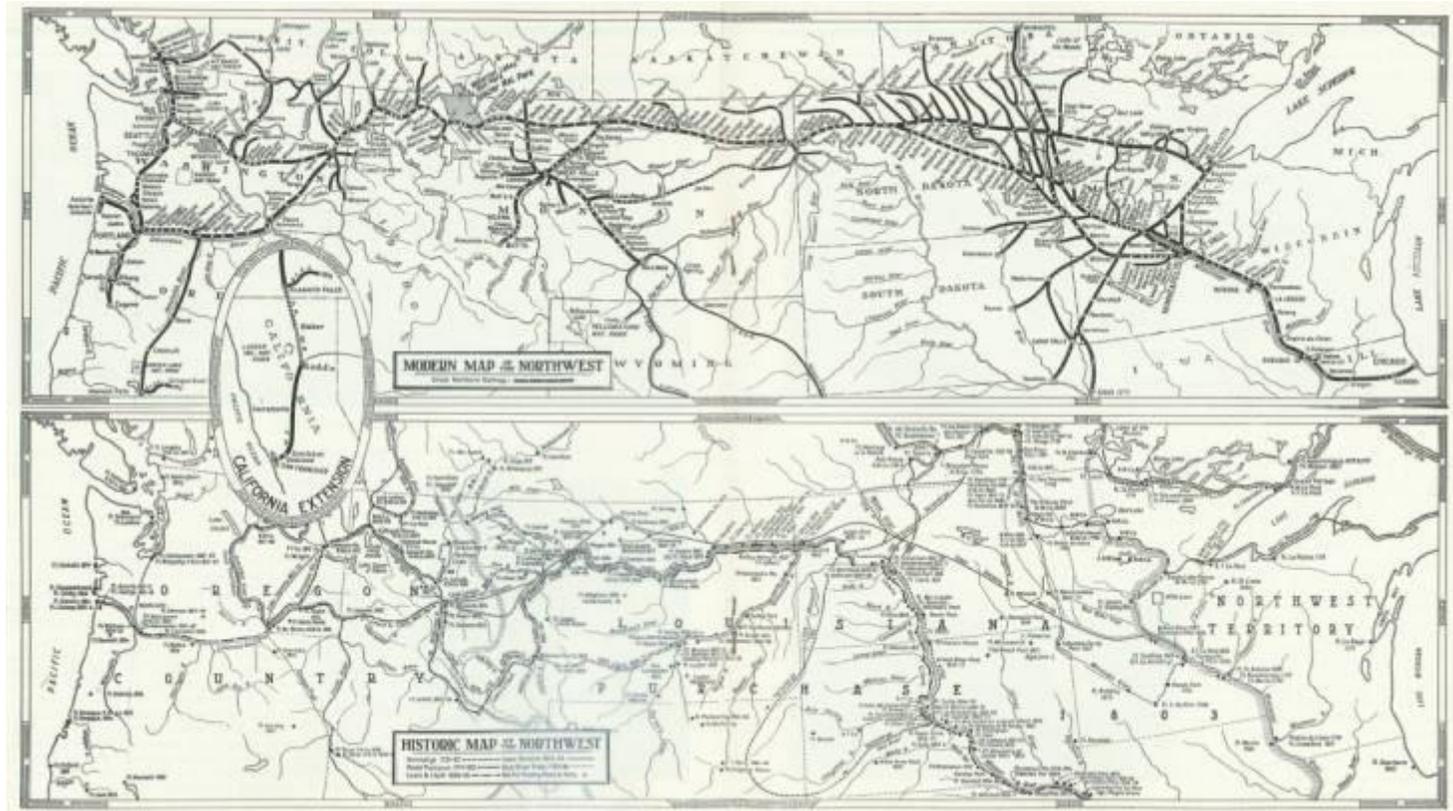
# Rail Competition comes to western Canada - Grand Trunk Pacific (and NTR) Plan:





# Railway Competition – Jim Hill/Great Northern

- Southern BC
  - Lake vessels
  - K&S/VV&E etc.
  - Spokane International
- Manitoba
  - Great Northern of Manitoba
- US
  - Soo Line War
- Announced
  - All of western Canada



# CP needs to grow and innovate with new competition:

- First up is locomotives for Mechanical Dept.
  - D-10 over 500 built 1905-1913
    - Largest class of steam engine in Canada
  - Other classes built 1899-1914 included G, M, N P, U & V – many hundreds more
  - Gradually became larger and more powerful
  - CP is early adopter of the Superheater
    - Reduces fuel consumption ~10%
    - Vaughn-Horsey superheater designed by CP staff



## Next up is boxcars:

- CP led the world with steel frame boxcar design
- CP orders 34,000 of these cars between 1909 and 1914
  - CP's largest ever car fleet of one design
- Other North American roads follow – total orders over 100,000 by 1920
- Design influences European and third world construction



Of course you need to maintain all this new equipment with new back shops. . .



Angus – Montreal 1904



Weston – Winnipeg 1907



Ogden – Calgary 1912

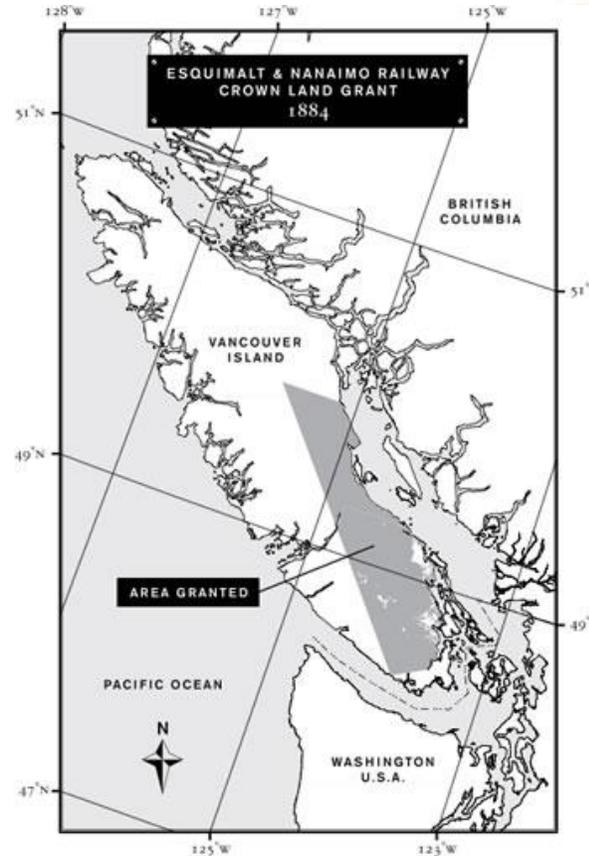
- Each shop was an enormous industrial facility occupying hundreds of acres and employing many thousands
- In addition to repairs, back shops also made new locomotives and cars

# Other lines of business developed or expanded during the Golden Years

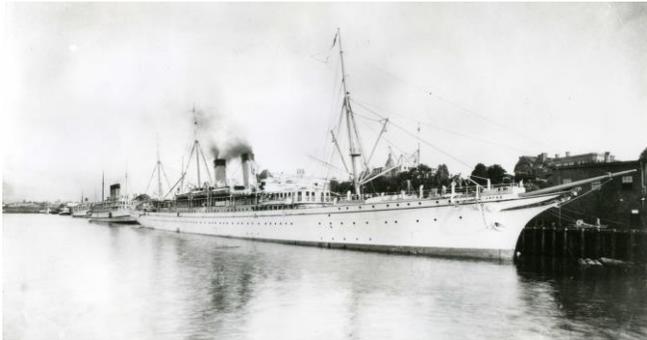
- CP acquires shortlines –
  - Esquimalt & Nanaimo on Vancouver Island
  - Dominion Atlantic in Nova Scotia
  - And some lines adjacent to existing operations
- Ships expands beyond the Pacific and Great Lakes
  - Atlantic Fleet
- Hotels expand from sideline to a major business
- Telegraphs span the empire
- Mining becomes the first of many subsidiary heavy industries

# Esquimalt & Nanaimo Purchase Included the E&N Land Grant

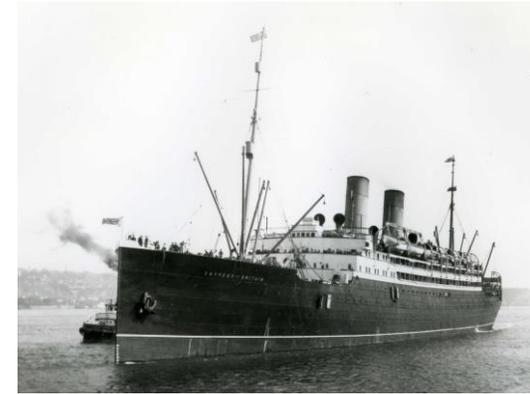
- Land grant provided logging royalties from some of the world's most valuable forests
- Royalties became more valuable over time
- Railway moved huge volume of forest products



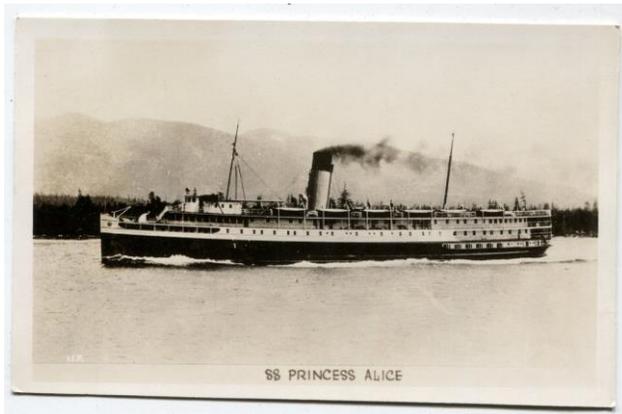
# CPSC Expands Dramatically and new Domestic Fleets



Empress of Japan 1891-1922



Empress of Britain 1906-1930



Princess Alice 1911-1949

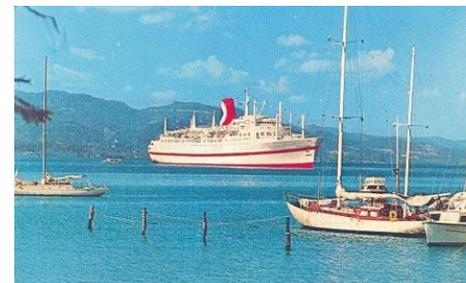


Moyie 1898 - 1957

# CP's cruise heritage 100 years later. . .



Princess Cruises started by chartering CP's Princess Patricia in 1965.



Carnival Cruises started with the former Empress of Canada in 1972



And Empress airline. . . 😊

# Hotels change from dining stops to the major Canadian chain:

- Started as stops to avoid dining cars on steep mountain grades
- Developed into hotels as tourist potential becomes apparent
- Hotel chain spreads across Canada
- Iconic hotels built or rebuilt in Golden Years include:
  - Empress
  - Banff Springs
  - Palliser
  - Château Frontenac



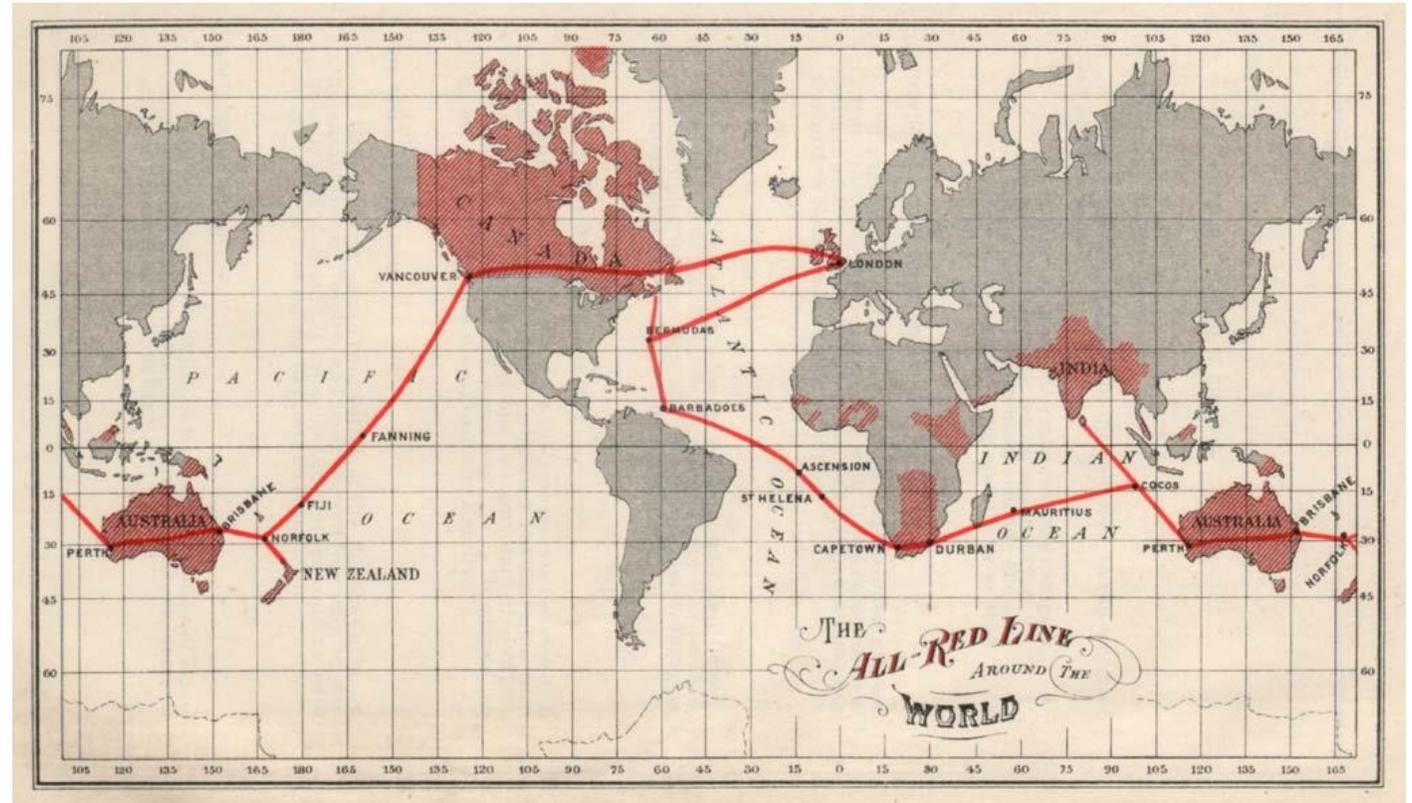
Fraser Canyon House, North Bend 1886



Empress, Victoria 1908

# CP Telegraphs was Canada's dominant carrier in this period:

- CP telegraphs start as an adjunct to railway operation
- By 1912, CP generated 60% of Canada's total commercial telegraph revenue
- Part of the "All Red" British communication system by 1902



# Cominco gets its start. . .

- Started with Trail smelter purchased in 1898 with railway lines
- In the meantime GN monopolizes Crowsnest Pass coal
- CP hired Walter Aldridge to conduct mineral operations
  - Aldridge has the Midas touch
  - Smelter initially designed for Rossland gold/copper ores, modified for Kootenay lead/zinc ores
  - Later technical innovations result in world's lowest cost lead/zinc smelter
- Mines
  - Start with War Eagle, Centre Star and St. Eugene



Trail Smelter 1898



St. Eugene Mine Moyie

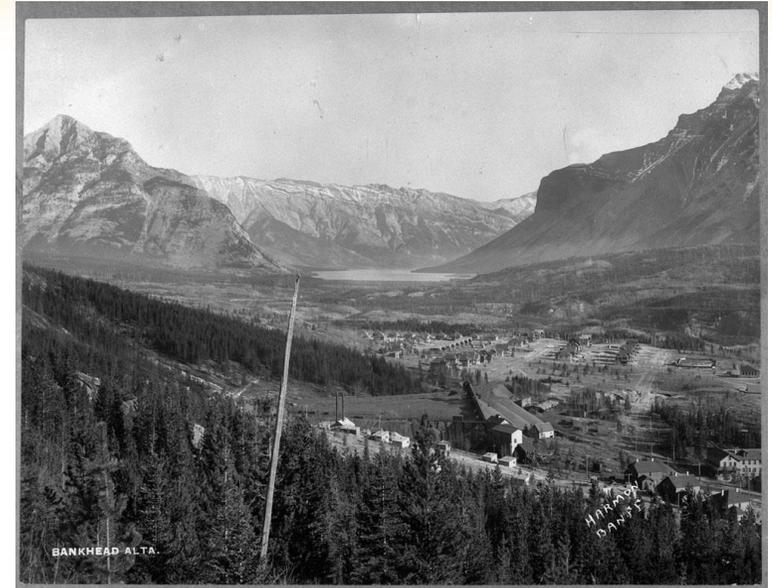
## Cominco strikes it rich. . .

- Aldridge first leases in 1909 and then purchases in 1912 the Sullivan Mine in Kimberley
- Complex lead-zinc ores had defeated three prior owners
- Cominco starts major R&D program to refine and smelt these ores
- End result was the world's richest lead/zinc mine for many decades which at one time produced 10% of the worlds lead



# Coal mining was not as successful for CP. . .

- CP was one of Canada's largest coal consumers
- A huge expense for the company
- CP developed mines at Bankhead AB and Hosmer BC. They closed early due to production problems
- CP acquired an interest in Lethbridge Collieries when it bought a shortline and mines from the Galt family
- Galt No. 10 aka the Shaughnessy mine was the last mine to operate in the Lethbridge area



Bankhead AB



Hosmer BC tipple

## Some Concluding Thoughts from the Golden Years

- CP transformed from a start-up to a major transportation, industrial and consumer services company
- Global reach through shipping arm and telegraphs although railway agents followed around the world
- Many investments stood the test of time and are still in regular use today, over 100 years later
- Conservative financial policy saved CP during and after WW I when all other major Canadian railways were insolvent, but -
- Anti-railway sentiment in farm community that arose during these years likely cost the company through the “crow rate” years and ill considered regulation