

Bridging into the Future Game Changers in the Rail Industry



**Calgary Transportation Hub Conference
November 18, 2011**

CANADIAN PACIFIC
DRIVING THE DIGITAL RAILWAY »

WHO ARE WE?



A North American transcontinental railroad providing freight transportation services, logistics solutions and supply chain expertise



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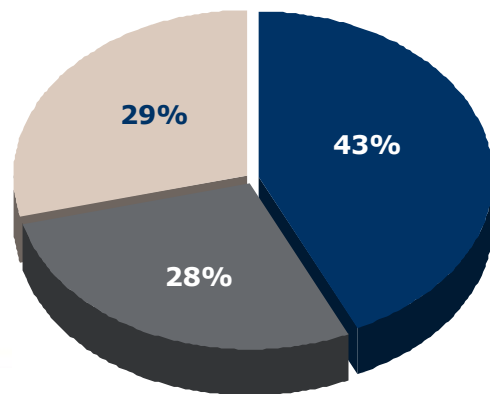
CP'S MARKET PLACE



CP conducts business within two broad markets – Global and North American Domestic. Our intercontinental trade is influenced by import/export container demand, the need for Canada's bulk commodities around the world and efficient supply chains linking buyers and sellers.

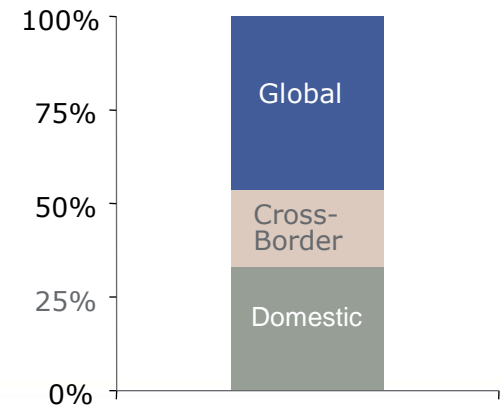


Mix of business
(2010 freight revenues)



Grain 23%
Coal 10%
Potash/Fertilizer 10%

■ Bulk ■ Intermodal ■ Merchandise



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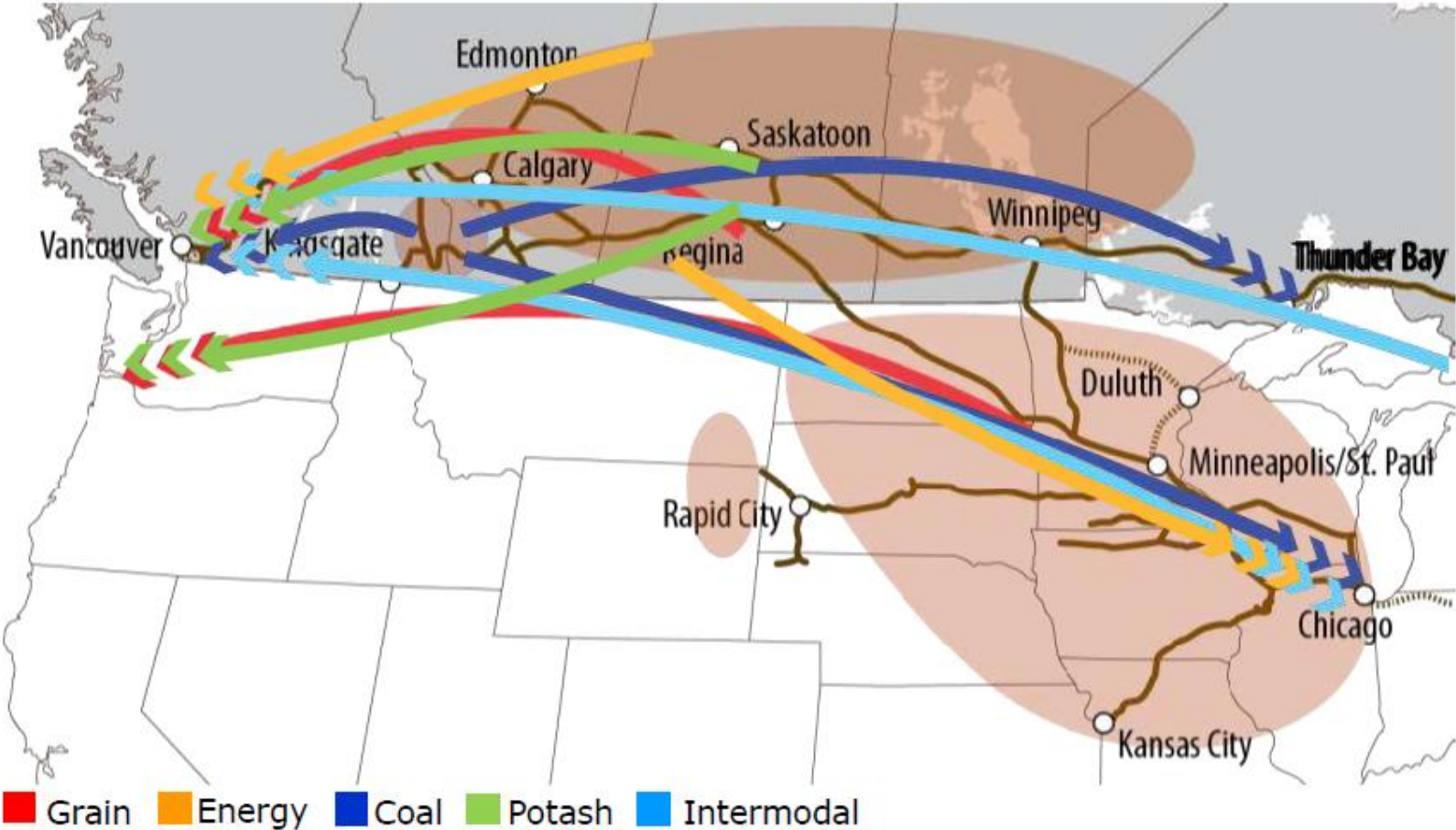
GAME CHANGERS



Number of factors present opportunities & challenges

- Rise of Asia
- Demographics – Labour Supply & Demand
- Increasing Global Supply Chain Competition
- Environment & Communities
- Technology

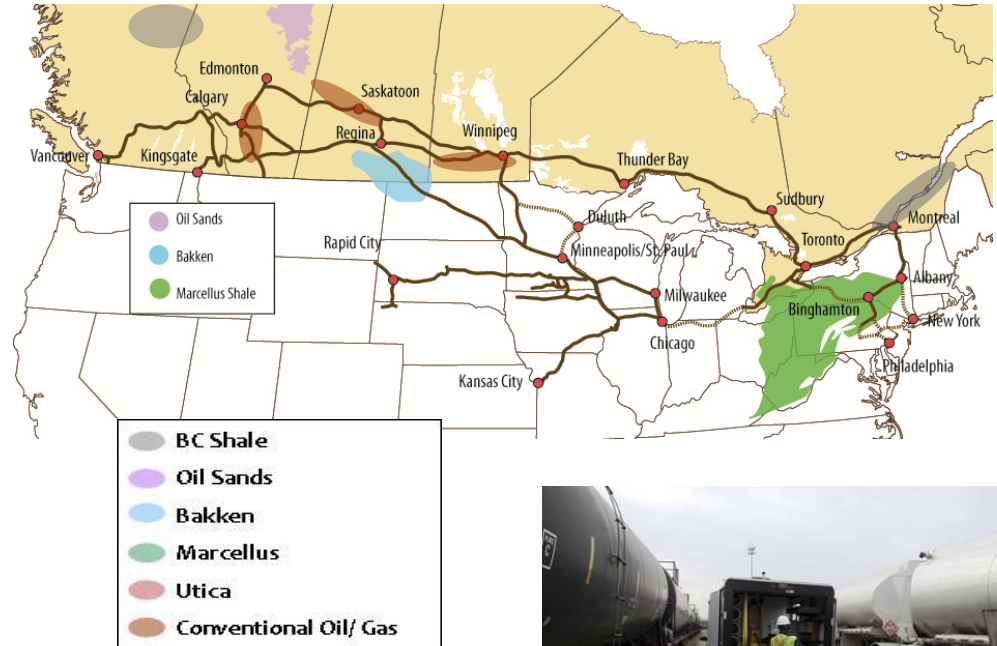
OPPORTUNITY FOR GROWTH



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RETHINK APPROACHES

Energy by Rail



Benefits

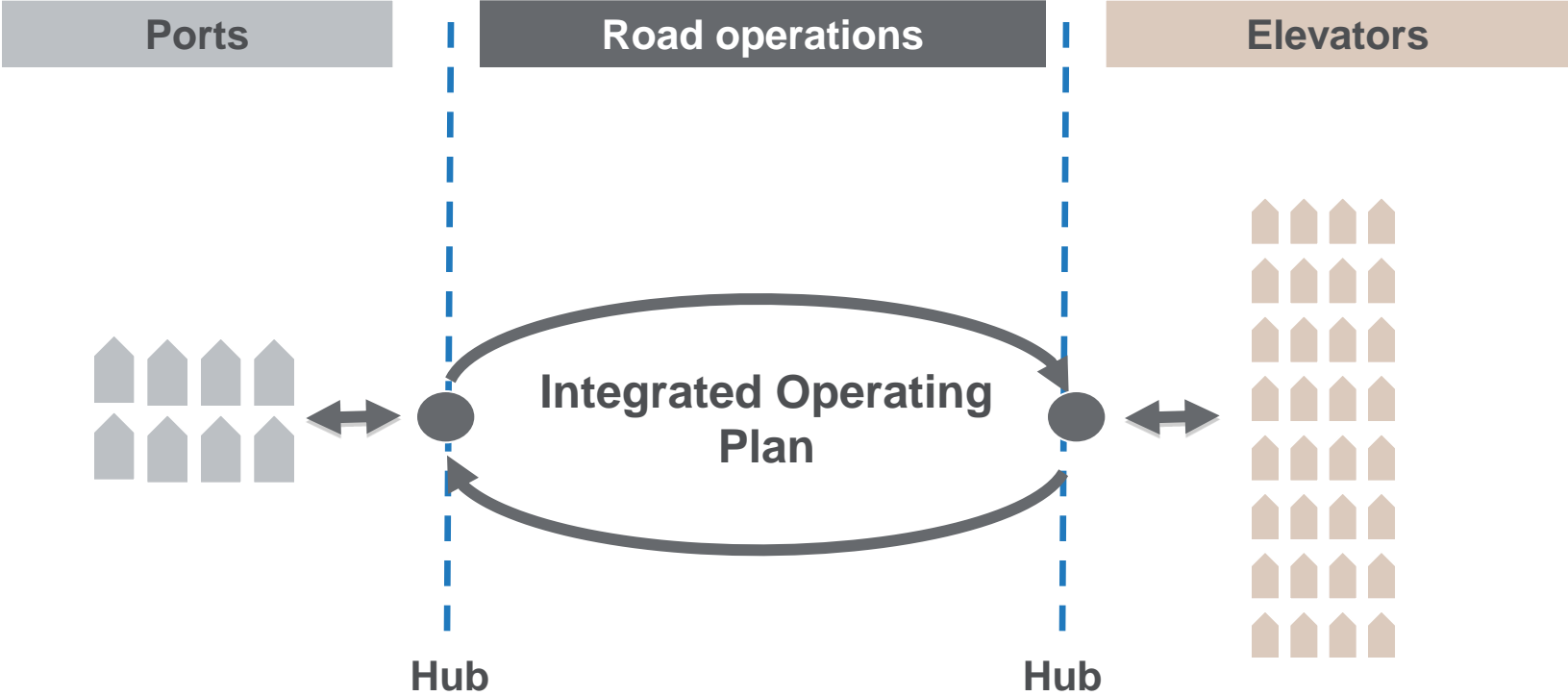
- Readily available right of way
- Scalable volumes
- Facilitates arbitrage opportunities
- Avoids dilution of light sweet crudes with heavier/sour crudes
- Rail provides optionality in times of pipeline outages and disruptions

Rail can serve as a pipeline to North American Destinations & International Markets

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RETHINK APPROACHES

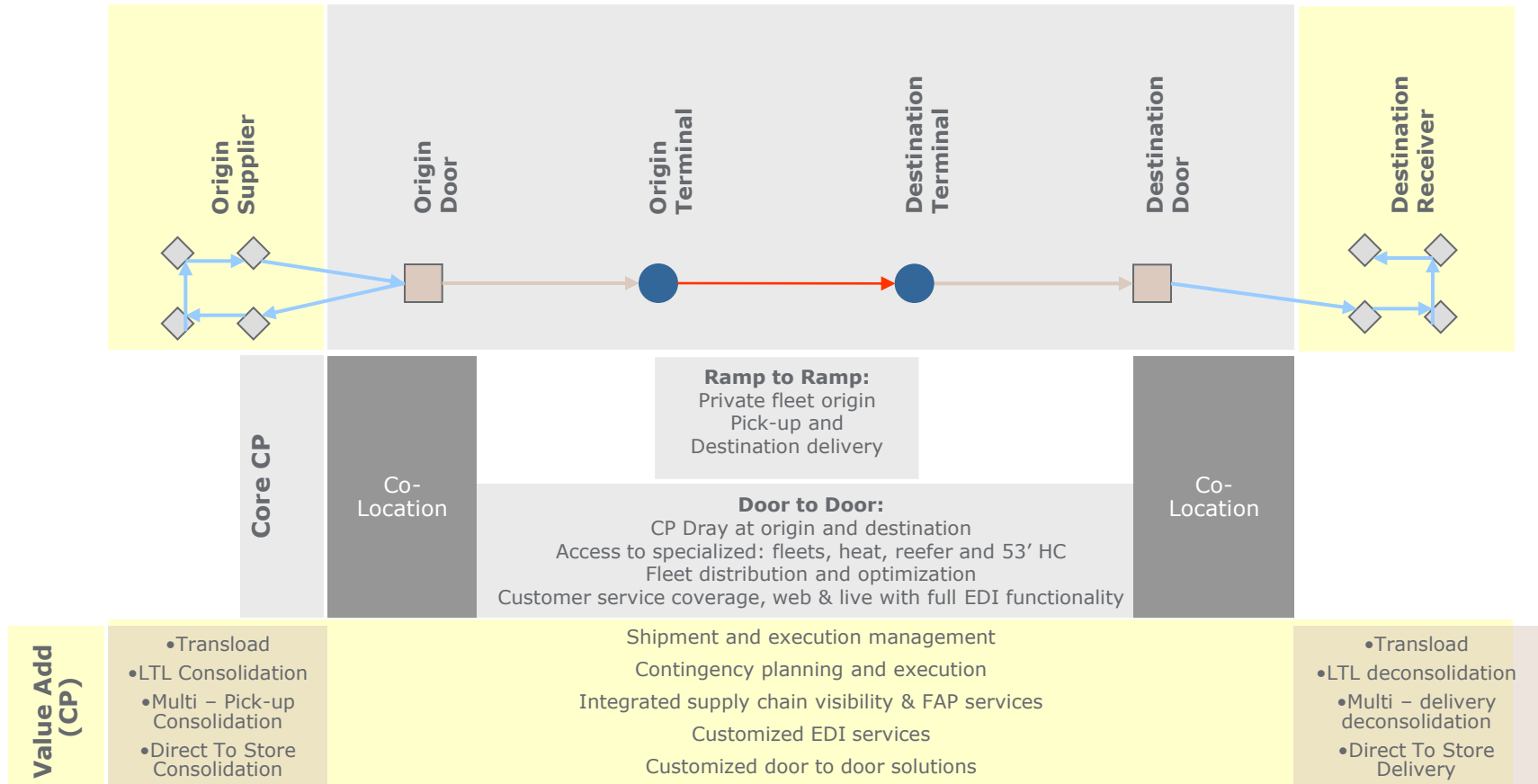
Grain - Keeping the pipeline fluid and balanced



**A new approach to managing grain shipment performance
– taking an entire shipment cycle perspective**

RETHINK APPROACHES

Intermodal – Co-location & Integration



Linking rail, road, Distribution Centres & Cross-dock operations

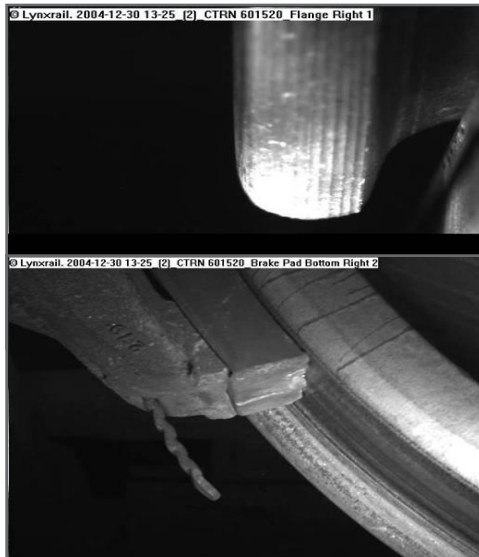
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INTRODUCE TECHNOLOGY



Leveraging new technologies for improving reliability, safety & productivity

- Automated Track inspections
 - Ultrasonic rail flaw detection
 - Infrared digital imaging rail ties
 - Digital imaging joint bars
- Automated Train inspections
 - Hot box detectors
 - Wheel impact load detectors
 - Hot/Cold wheel detectors
 - Technology Driven Train Inspection



Example: Technology Driven Train Inspection

- less train/car dwell in terminals → service
- fewer manual inspections → productivity
- improved quality of inspection → safety



Wheel flange and brake shoe inspected in train at a speed of 45 mph

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INTRODUCE TECHNOLOGY



Leveraging new technologies for improving reliability, safety & productivity

Deployment of new technologies presents opportunity for improved customer interface, streamlined processes and less rework

- Tablet computers deployed to all conductors for local service
- Reduces rework and errors
- Allows changes to work plan to be downloaded automatically
- Plan is to deploy across entire railway



INVESTMENT IN INFRASTRUCTURE

Targeting efficiency, productivity & capacity

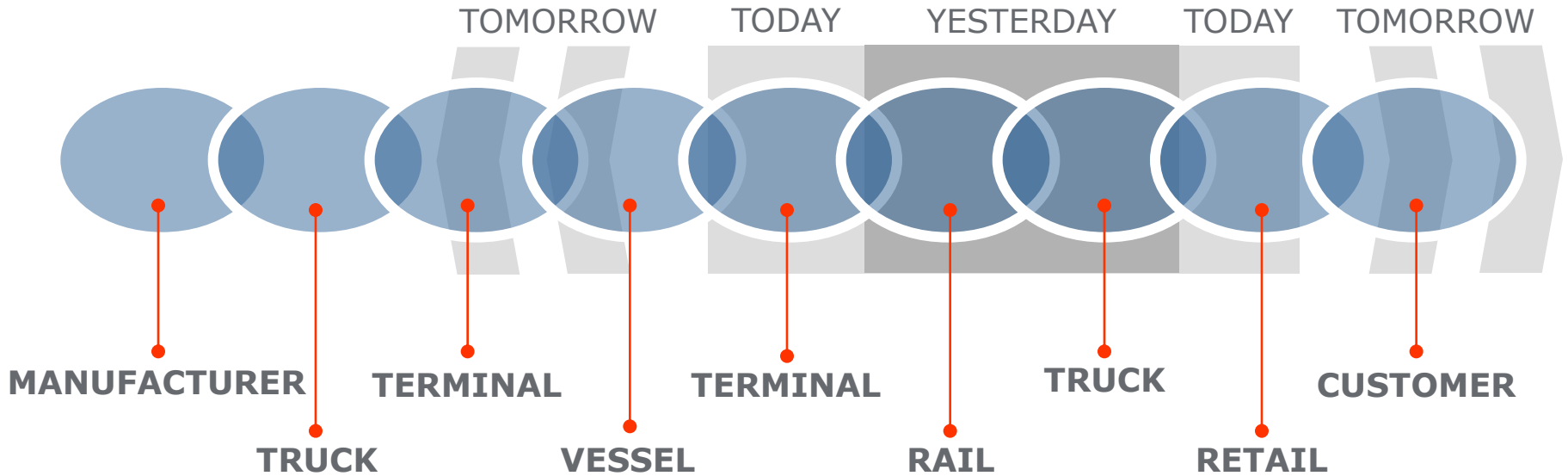


- Western Corridor
- North Line
- US Midwest

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COLLABORATE

Lengthen & Integrate the Supply Chain



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COLLABORATION

Working with Ports and Governments



Collaboration APGCI Trade Areas



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SEIZING THE OPPORTUNITY

Requires Action of all Supply Chain Participants
& all Levels of Governments



- Investment Infrastructure to support Growth
- Supportive Environment for Investment
- Investment in and Implementation of Technology & Support for that Investment
- Increased Collaboration/Integration
 - Supply Chain
 - Governments – Gateway 2.0/FTZ
 - Port Calgary?
- Innovation
- Labour
 - Training & Immigration Policy
- Sustaining a social licence