

# Partnering Infrastructure Development to Meet Hemispheric Growth

## *AAPA Port Commissioners Seminar*



# Agenda

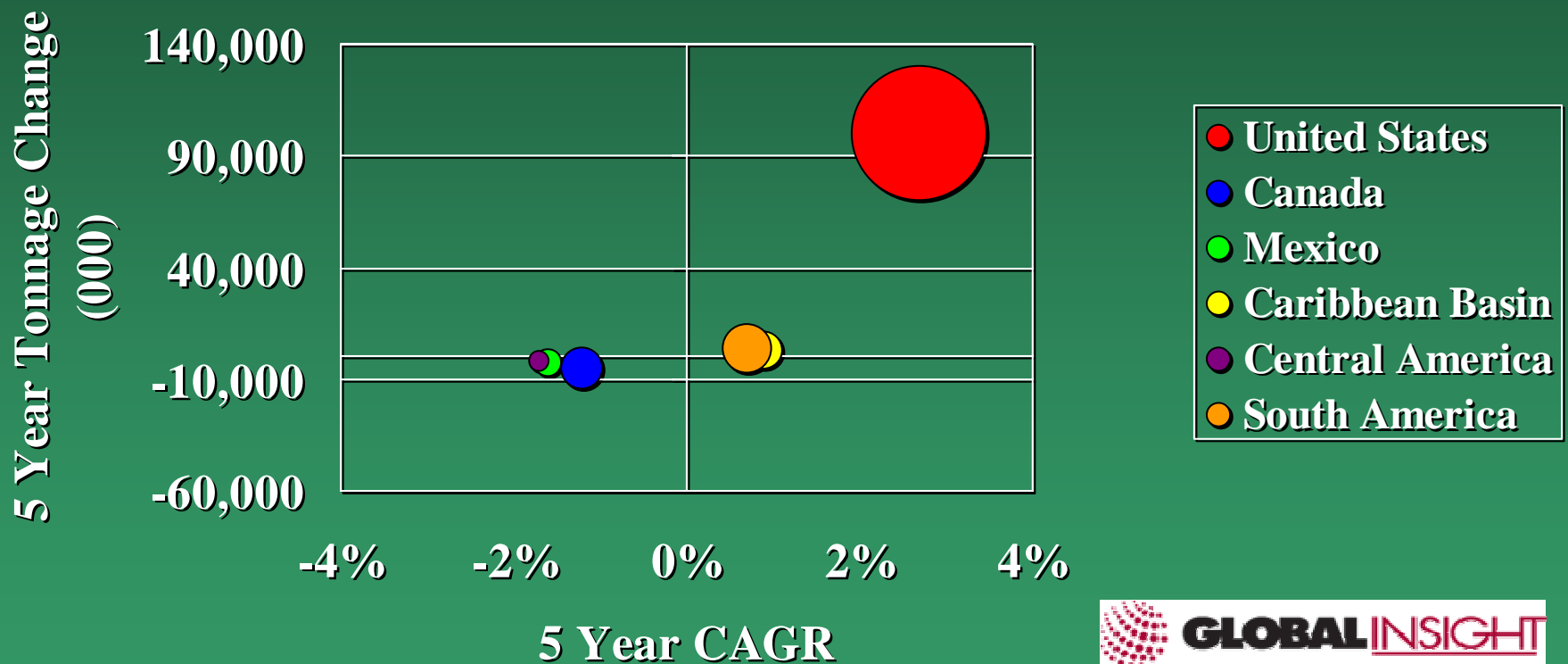
- I. Objectives
- II. Hemispheric Growth Prospects
- III. Modal Challenges
- IV. Partnering Solutions-the Key to a Systemic Solution
- V. Implications for the Port Industry

# I. Objectives

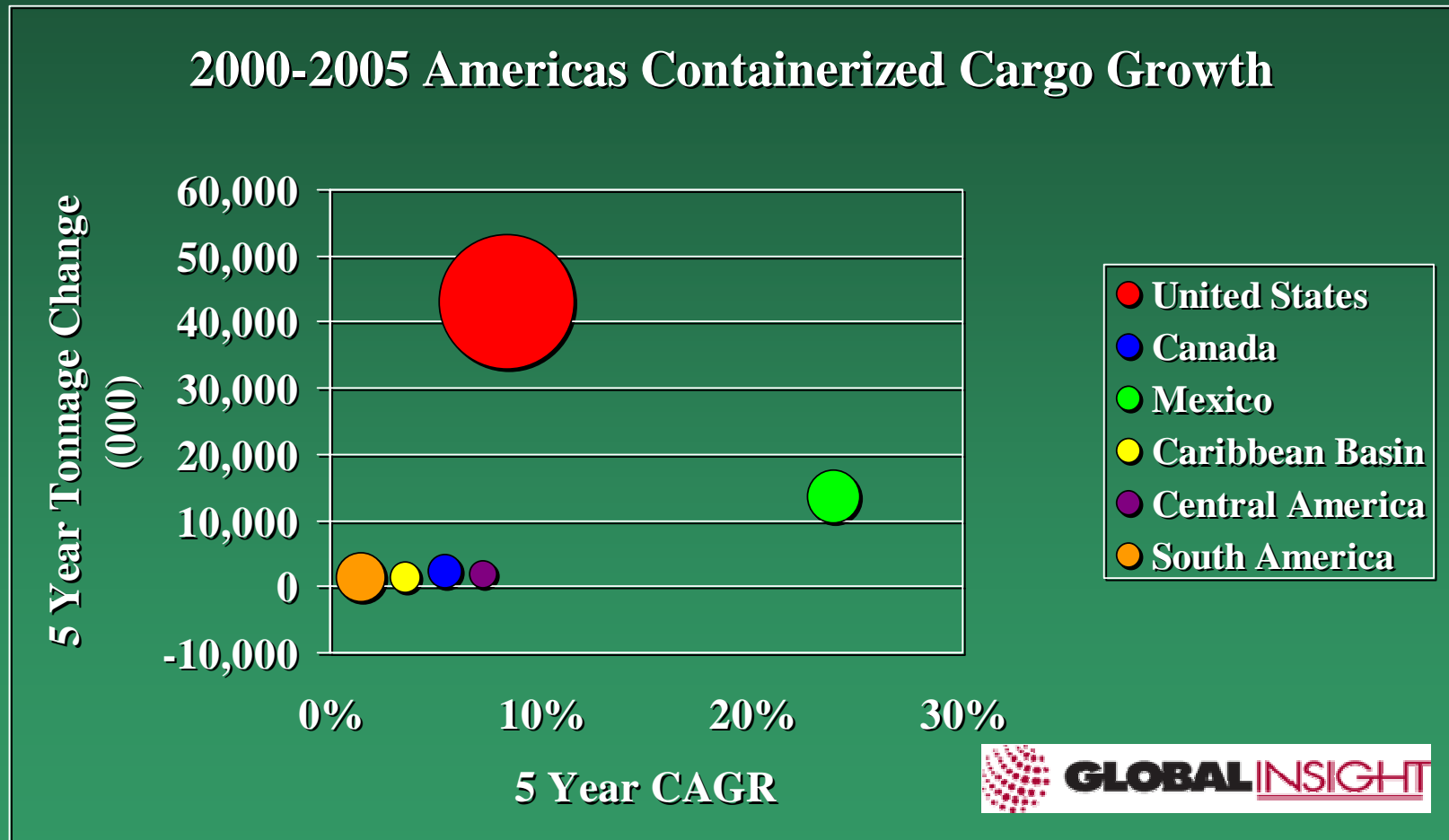
- Review the Growth Prospects
- Define the Challenge
- Outline Some Options
- Discuss Some Specifics

# Hemispheric bulk cargo performance has been mixed over the past five years

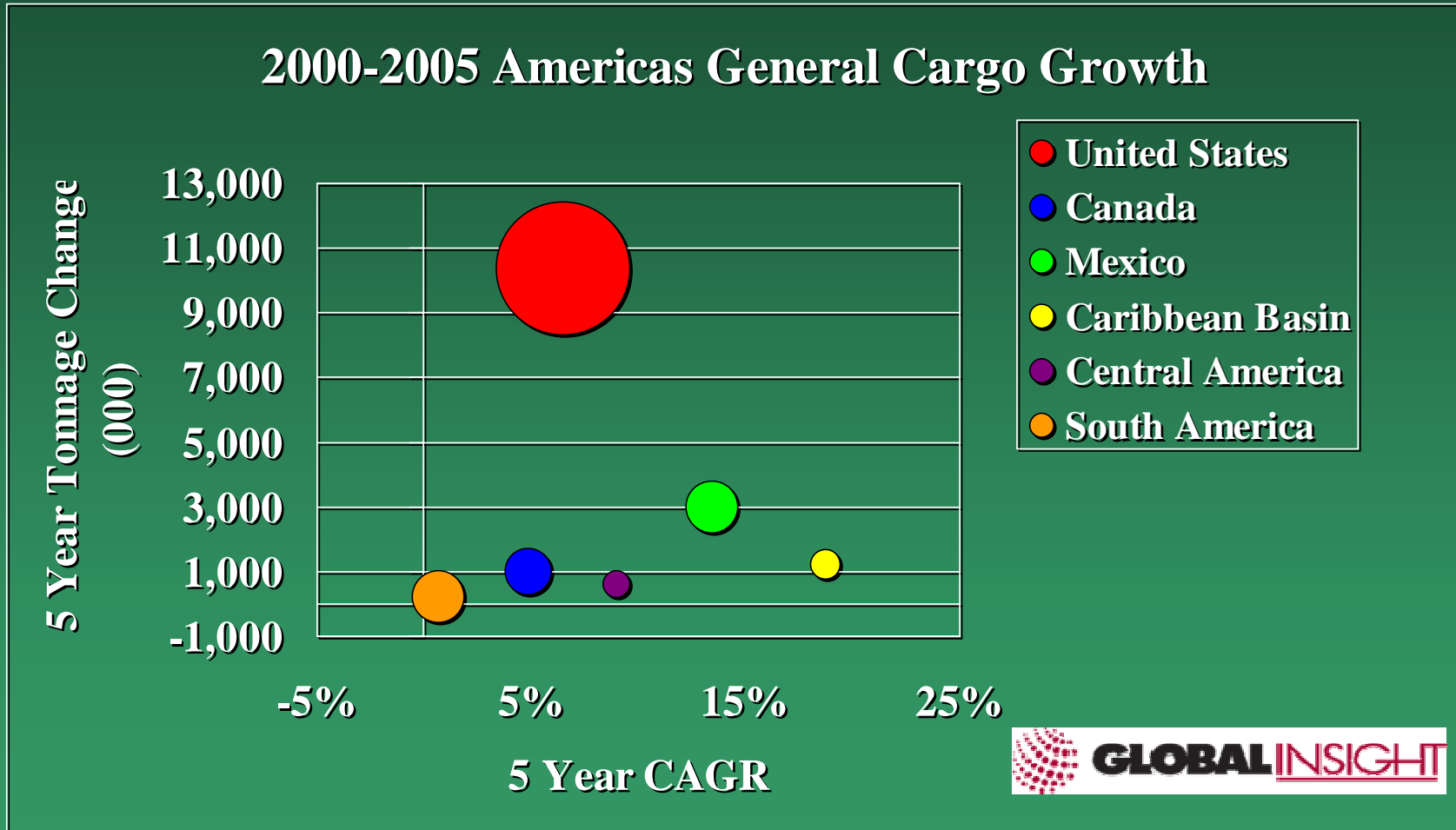
## 2000-2005 Americas' Bulk Cargo Growth



# Mexico has lead the way in terms of growth in hemispheric container trade



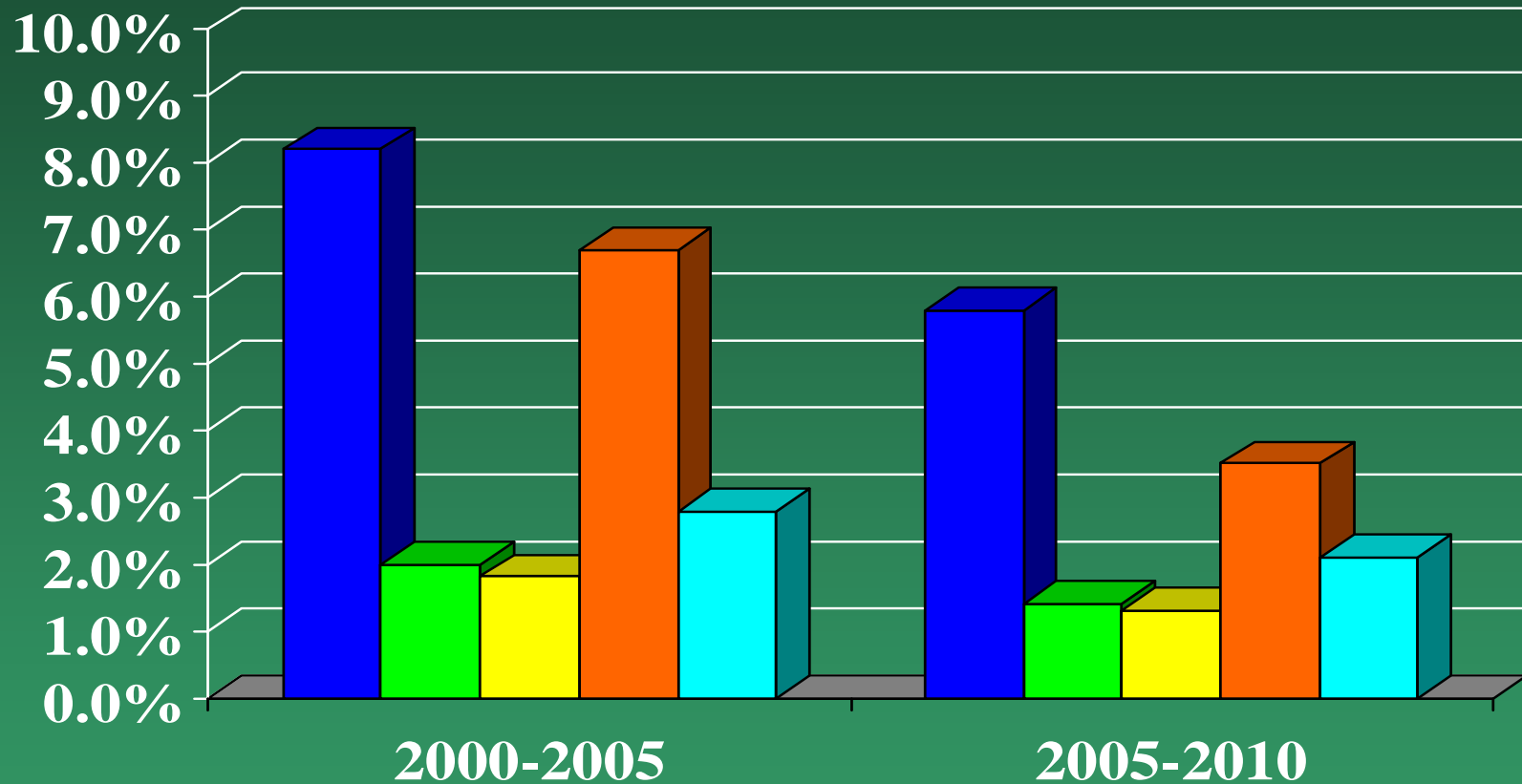
# While almost all regions have contributed to overall growth in breakbulk cargoes



# Trade Growth Will Continue to Increase the Pressure on Ports

- At a 5% CAGR, trade doubles every 15 years
- At a 7.5% CAGR, trade doubles every 10 years
- In 2005, the major North American ports handled a reported 44+ million TEUs
- By 2010, this volume will approximate 60-65 million TEUs

# The next five years will see sustained growth across the hemisphere



■ Container ■ Dry Bulk ■ Liquid Bulk ■ General ■ Total



# II. Define the Challenges



# Motor Carrier Challenges



# Several factors have driven productivity gains

- Trailer size increased from 40' to 53'
- Truck engine and maintenance cycles lengthened
- Truck engine fuel efficiency increased
- Empty miles were reduced
- Unionized carriers share down
- Improved technology and processes

# However, many of these productivity opportunities may be reaching their end

## *Area of Improvement*

- Equipment Gains
- Fuel Efficiency Gains
- Labor Gains



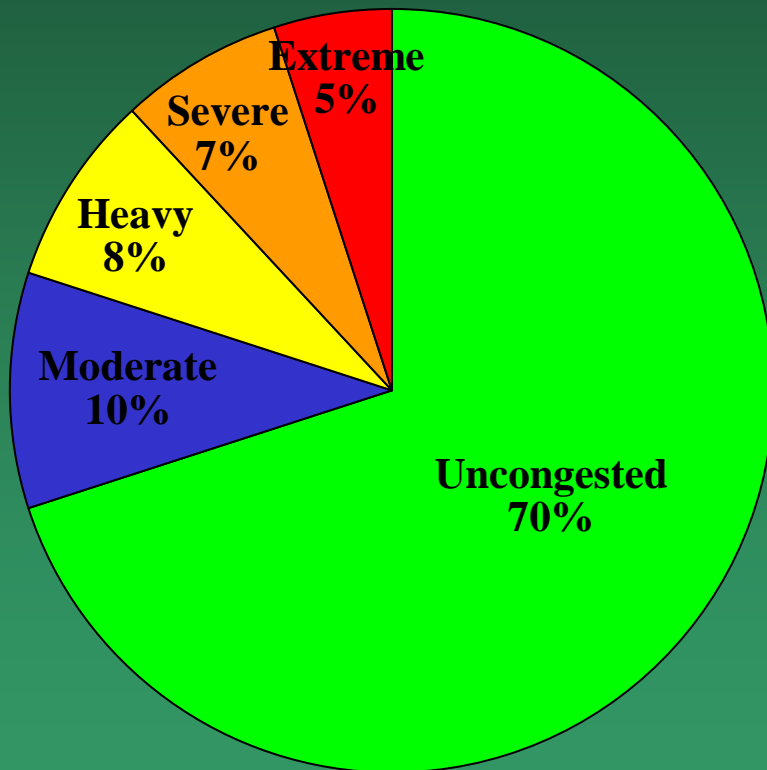
## *Inhibitor*

- 53' to 57' Unlikely
- Environmental Regulations
- Hours-of-Service Regulations

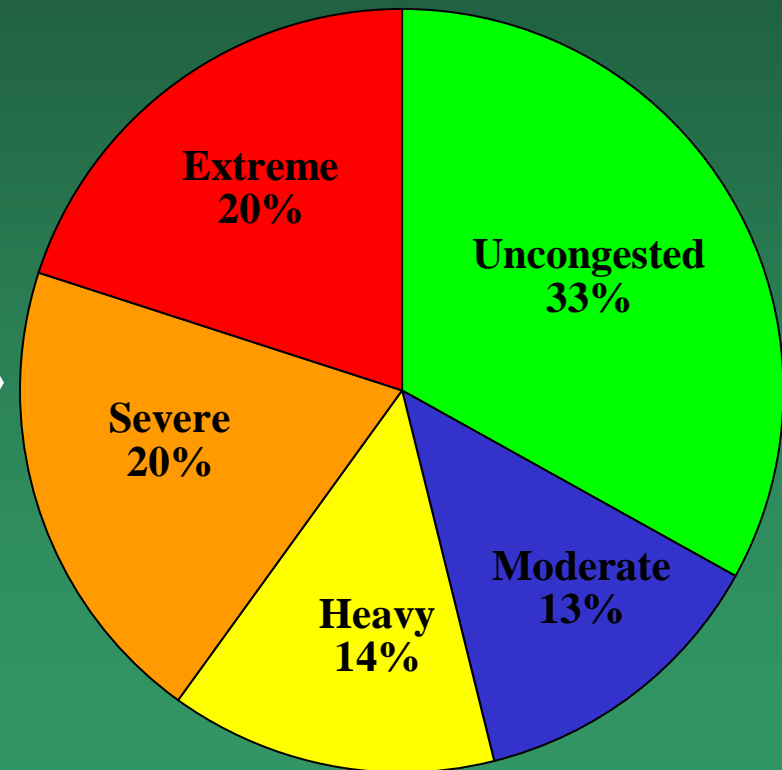
*In addition to slower productivity gains, the infrastructure is reaching its capacity*

# Highway infrastructure is facing significant constraints

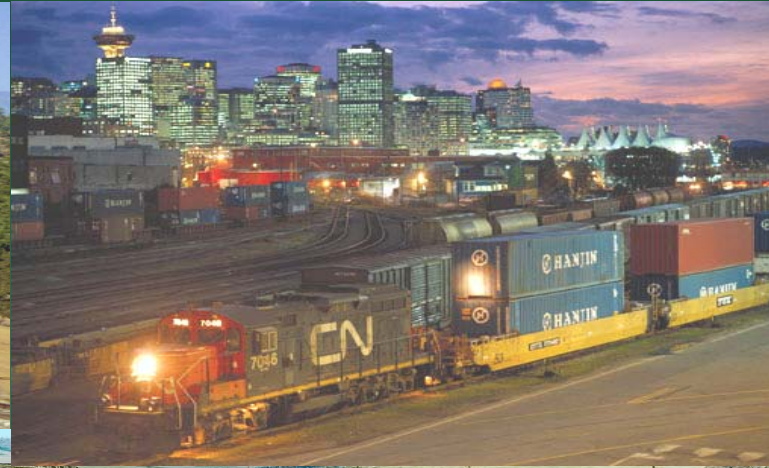
Percent of Peak-Period  
Travel at Congestion Level  
1982



Percent of Peak-Period  
Travel at Congestion Level  
2002

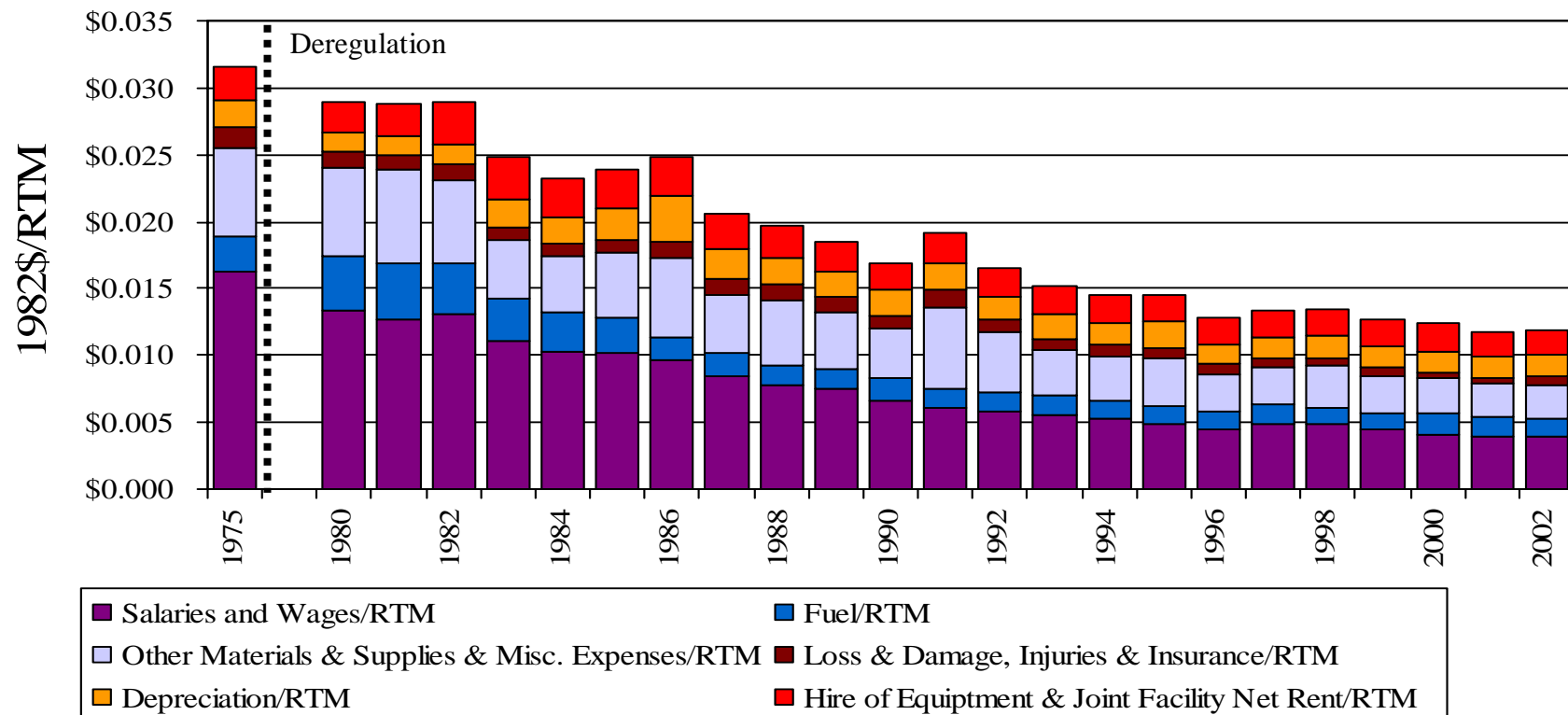


# Rail Industry Challenges



# Railroads have more than halved their cost/revenue ton-mile since deregulation

## Railroad Expenditures per Revenue Ton-Mile (1982\$)



Note: 1980 and 1981 Salaries & Wages Data reflect AAR's estimate of 95% of total payroll expenses. In comparison year (1982), this measure differs from the 1975, 1982-2002 methodology by 0.4%.

Sources: AAR "Railroad Ten-Year Trends." (various ed.); AAR "Analysis of Class 1 Railroads." (1981); AAR "Railroad Facts" (various ed.).

# Productivity gains have contributed to the decreasing cost/revenue ton mile

## Productivity Improvements

- Labor requirements declined
- Networks and track were rationalized following mergers
- Engine fuel efficiency increased
- Railcars increased to 286,000 lb. gross rail load
- Many railcar types were improved



# For railroads, some of these productivity opportunities may have reached their limits

## *Area of Improvement*

- Equipment Gains



- Labor Gains



- Fuel Efficiency Gains



## *Inhibitor*

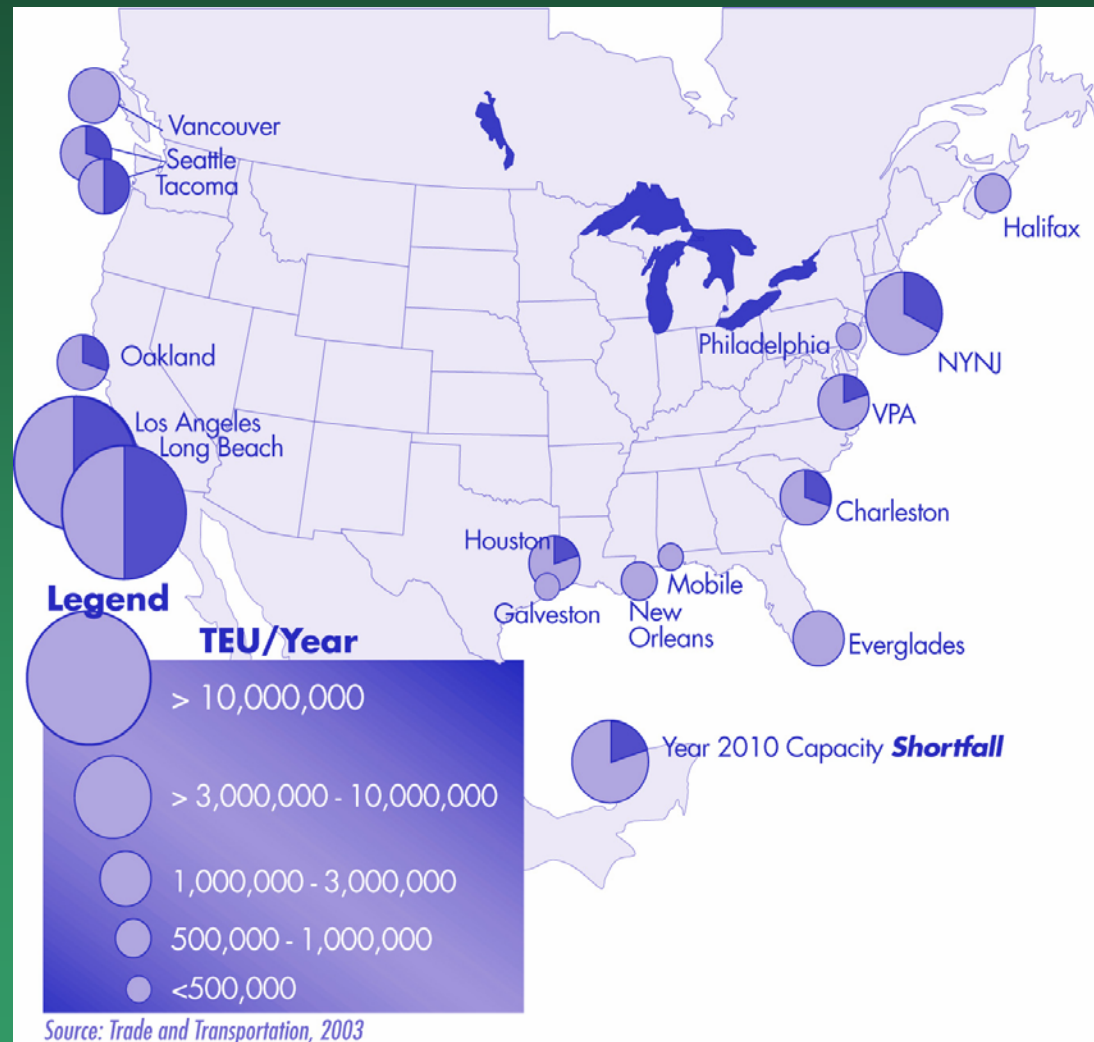
- 315,000 GTW Unlikely
- Adding Employees
- Future Locomotive Environment Regulations?

*In addition to slower productivity gains, the infrastructure is reaching its capacity*




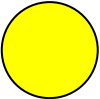




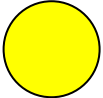

# Port Industry Challenges



# North American port infrastructure is under increasing pressure



# Port Region Container Capacity Summaries

	2005 Net Position	2010 Net Position	Comments
PSW			LA/LB face significant capacity challenges during the next five years. Oakland should have ample capacity
PNW			Tacoma has largest expansion potential although port-rail and continued PSW diversions pose challenges
Atlantic			North Atlantic, particularly with the AMPT-Portsmouth terminal should provide adequate capacity. The South Atlantic will need to improve density and reduce dwells. A significant increase in Suez services would pose challenges.
South Florida			Southport expansion, terminal reconfiguration, higher density and lower dwell should accommodate growth
Gulf			Bayport, Choctaw and some combination of Tampa, Texas City, Corpus Christi, Brownsville, Millennium Port and a rebuilt Gulfport should provide adequate capacity

# The Port Industry challenge is multi-dimensional

- Security
- Environmental
- Community
- Harbor deepening
- Labor efficiency and effectiveness
- Berth utilization
- Reducing dwell times/increasing velocity
- Port-rail interface
- Regional transportation infrastructure

# Security Challenges: Evolutionary or Revolutionary?

## Operational Challenges

- Scope: all trade, regional trade, specific goods, specific companies?
- Approach: 100% inspection, sampling, profiling?
- Technology
- Sustaining/improving Productivity & efficiency

## Financial Challenges

- What will it cost given it's a moving target?
- Who benefits?
- Who should pay?
- What are the funding options?
- Which are most equitable?

# Environmental & Community Challenges

## Environmental Challenges

- Who is in charge?
- What are the rules?
- What are the standards?
- How far should/must we go?
  - Compliance
  - Tested state of the art
  - The extra mile, i.e. net improvement
- Who benefits/who should pay?
- What is the balance among stewardship, sustainability and financial realities?

## Community Challenges

- Drivers
  - Globalization & trade growth
  - Urbanization of the waterfront
- Issues
  - Noise, lights, congestion, air quality
  - “Quality of life”?
  - Local vs. regional vs. national trade
- Challenges
  - Defining the issues
  - Establishing a fact-based, objective dialogue
  - Finding the balance

# IV. Partnering Solutions, the Key to a Systemic Approach





# US Transportation Funding

Characteristic	Highway	Aviation	Maritime
Constituency	Broad-based	Broad-based	Narrow, fragmented
Funding Source	User fees	User fees	User fees and general funds
Management	Centralized: FHWA	Centralized: FAA	Fragmented
Disbursements	Formula-driven	Formula-driven	Generally project-based
Funding availability	Predictable	Predictable	Unpredictable
Cost-benefit linkages	Clear	Clear	Unclear
User fee visibility	Low: gas taxes	Low: ticket fees	High: HMF, fuel taxes

# Canadian Transportation Funding

Characteristic	Highway	Aviation	Maritime
Constituency	Broad-based	Broad-based	Narrow, fragmented
Funding Source	User fees and general funds	User fees and general funds	User fees and general funds
Management	Centralized: Transport Canada	Centralized: Transport Canada	Centralized: Transport Canada
Funding availability	Predictable	Predictable	Predictable
Cost-benefit linkages	Clear	Clear	Unclear
User fee visibility	Low: gas taxes	Low: ticket fees	Low: fuel taxes

# Overview of Canada's Pacific Gateway Strategy

- Precedent setting policy change in federal government policy
- **Objective**: Address the interconnected issues in an integrated way and accelerate the development of the Pacific Gateway, and its benefits for British Columbia, Western provinces and the entire country
- **Content**: \$590 million in specific measures and commitments in several interconnected areas that impact the effectiveness of the Pacific Gateway, and how well Canada takes advantage of it

# The Challenges

Needs are increasing

Environmental & Community challenges

Security Needs

Funding shortfalls

Modally focused

Maritime Industry: Fragmented approach

Maritime visibility

Finding the Common Ground

# Lessons Learned

## What Has Worked

- Project-specific;  
focused on bottlenecks
- Finite timelines
- Environmentally  
oriented
- Comparatively small
- Tangible benefits
- User-fee based funding

## What Hasn't Worked

- Policy-related
- Large scale
- Capacity-driven
- Broad benefits
- Complex funding
- Grant or appropriations  
based funding

# What Are Some of the Options?

## The “Big Bang”

- Centralized, integrated, multimodal policy and funding
- Integrates the surface modes
- Builds on best practices
- Systemic approach to investment

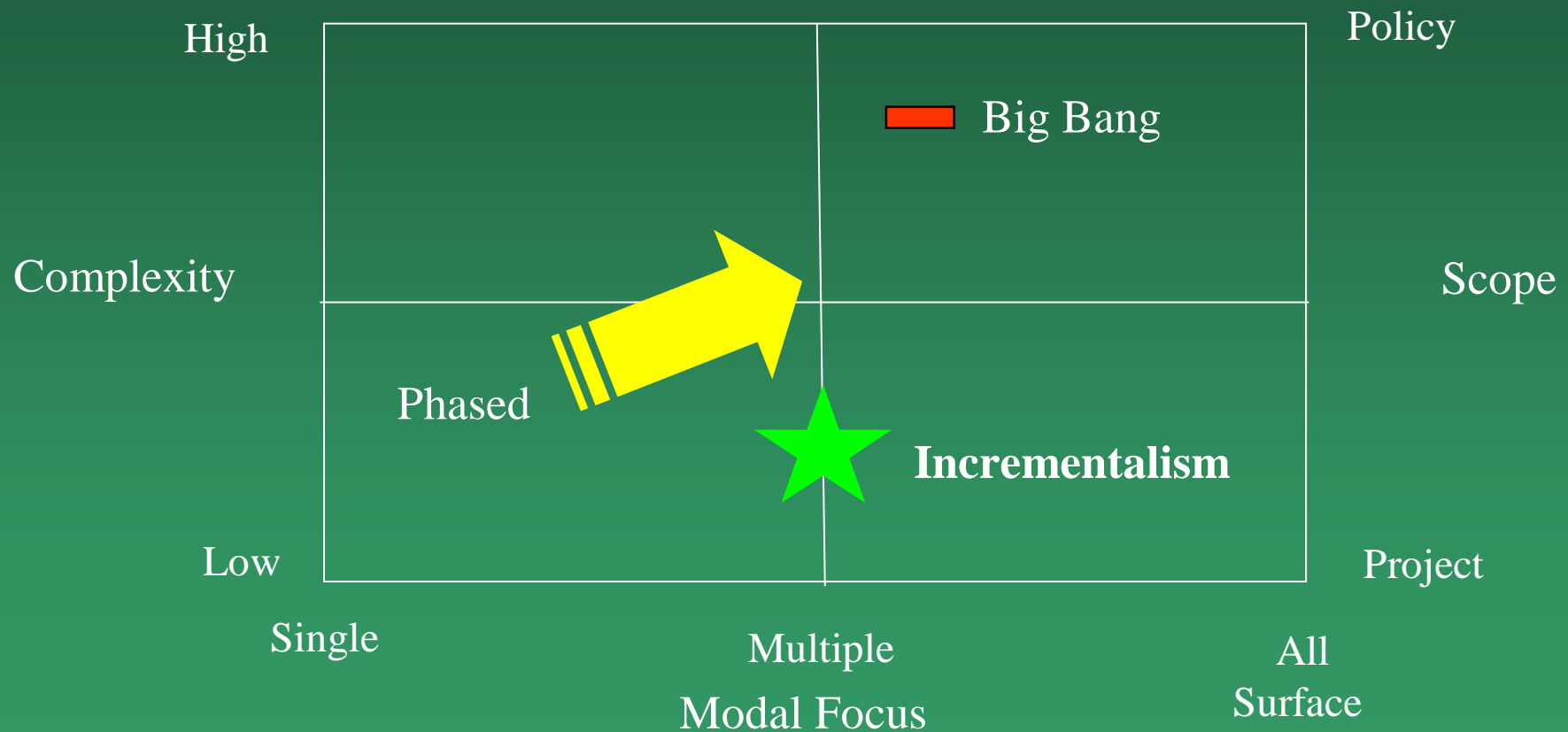
## Phased Approach

- Redesign the Maritime Model
- Design a Rail Model
- Develop a sustainable funding source for multimodal projects
- Long-term, evaluate comprehensive modal integration

## Incrementalism

- Cooperative, project-specific, industry-driven approach
- Significant industry participation
- Works within existing regulation and funding mechanisms
- Identifies and implements an evolutionary approach to funding

# Pragmatism & Political Realities Are Key Success Drivers in the Short to Mid-Term



# Implications: A dual strategy most likely represents the best approach

## Short-to-Midterm

- Focus on enhancing Maritime funding based on current best practices
  - Centralized
  - Dedicated funding
  - Full disbursement of collected funds
  - User fee based
  - Industry participation

## Mid-to-Long Term

- Phased approach that integrates road, rail and maritime (deep sea, short sea, inland) .
  - Initial focus on what works
    - Multimodal
    - Mitigation: congestion, air
    - Specific projects
  - Incremental expansion built on successes



# Implications for the Port Industry



# It depends on how one views the glass



Half Empty



Half Full

# The Port Industry is highly diverse in terms of ports' capabilities and needs

<p>Strong &amp; Diverse</p> <p>Financial Health</p>	<p><i>We can probably survive</i></p>	<p><i>We are winning</i></p>	<p>High &amp; dedicated</p> <p>Access to Capital</p>
<p>Weak &amp; Concentrated</p>	<p><i>An industry approach is critical</i></p>	<p><i>We need to pursue all options</i></p>	<p>Small &amp; limited</p> <p>Large &amp; diverse</p>
<p>Narrow &amp; small</p>		<p>Business Base &amp; Size</p>	<p>Large &amp; diverse</p>

# It depends on how one sees the glass

## Half Empty

- The pot of funds is shrinking
- The status quo is the best we can hope for
- Emphasis is on getting my fair share
- We will cooperate when it is compelling

## Half Full

- We can grow the pot of funds
- The status quo is not an option
- We will gain more by cooperating

# What is Required?

- ✓ Internal Assessment
- ✓ Port/Maritime Industry Game Plan
- ✓ Multimodal Game Plan

# Internal Assessment

- Is the status quo acceptable or is change imperative?
- What do we need?
- What are the critical success factors?
- What are worldwide best practices?
- Are we committed to a sustained change effort?
- How do we fund it?

# Port/Maritime Industry Game Plan

- Is it a Port or Maritime Industry Game Plan?
- Who are the key players?
- What are the roles and responsibilities?
  - Government
  - Port Industry
  - Private sector
- What are the key elements of the game plan?
  - Governance
  - Funding: who pays, who benefits
  - Disbursement
  - Oversight & control
  - Performance monitoring
  - Setting long-term direction

# Port/Maritime Industry Game Plan-- Continued

- What is the contingency plan?
  - Public-private partnerships
  - A national tariff that is competition neutral
  - Financial self-sufficiency
  - Taxing authority



# Multimodal Game Plan

- Who are the key decision-makers?
- Is there common ground?
- Is there a commitment to partnering solutions?
- What does each of the parties bring to the table?
- What does each party leave at the table?
- What is the plan?
- How do we execute?
- Many of these questions are the focus of the Framework for a National Freight Policy

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