

America's Transportation Challenge

Northwestern University Transportation Center
William A. Patterson Transportation Lecture
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Chairman, President and CEO



Discussion topics

- **Railroad Industry Overview**
- **BNSF Railway Company Overview**
- **Reflections from National Surface Transportation Policy and Revenue Study Commission Final Report**

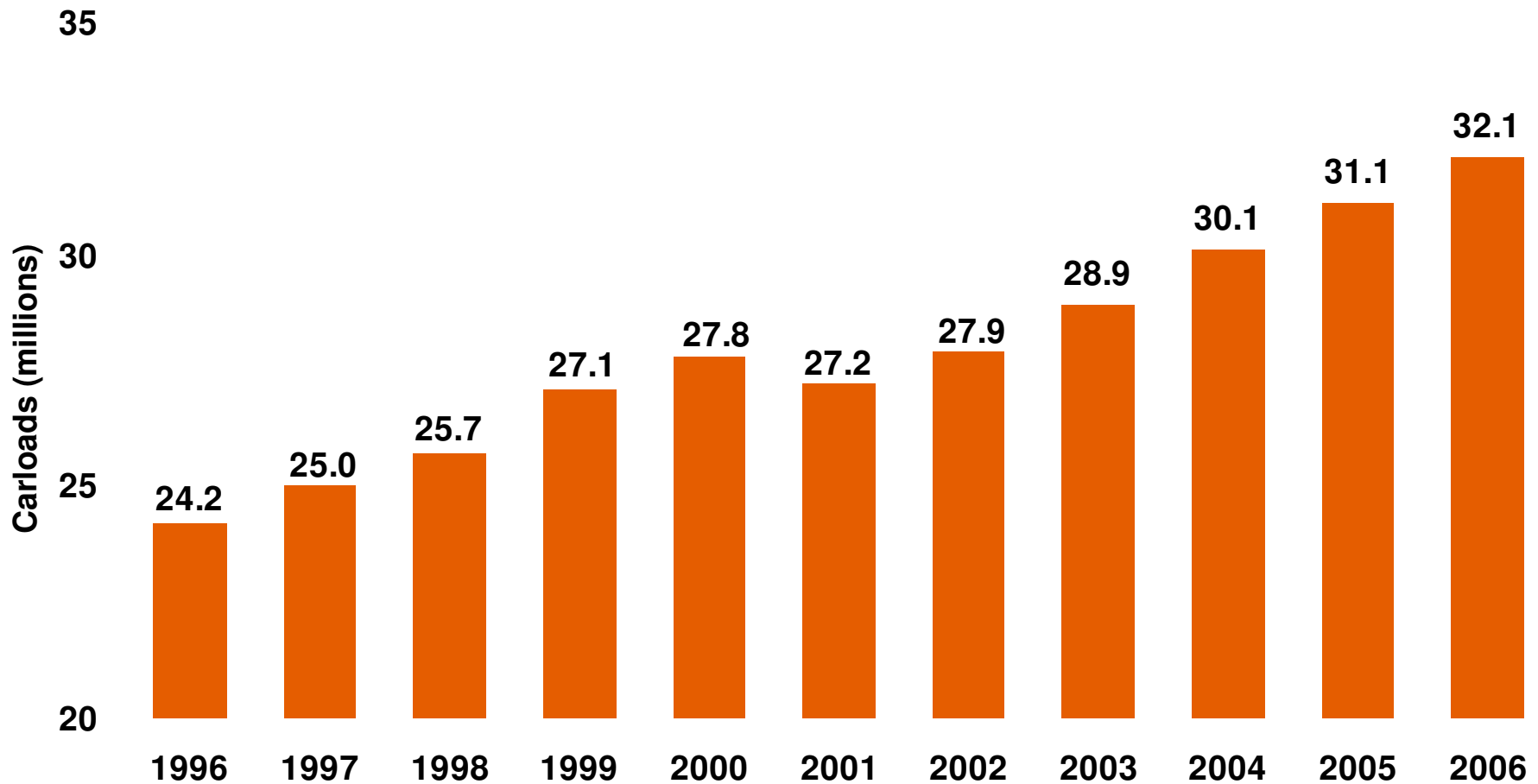
U.S. Class I railroad growth

	<u>1980</u>	<u>2006</u>	<u>% Change</u>
Net freight revenue	\$26.3 billion	\$50.3 billion	+91.6%
Net investment	\$33.4 billion	\$112.6 billion	+237.1%
Return on net investment	6.8%	10.2%	+50%
Employees	458,332	167,581	-63.4%
Locomotives in service	28,355	23,732	-16.3%
Carloads originated	22.2 million	32.1 million	+44.6%

Source: AAR

U.S. Class I volume growth

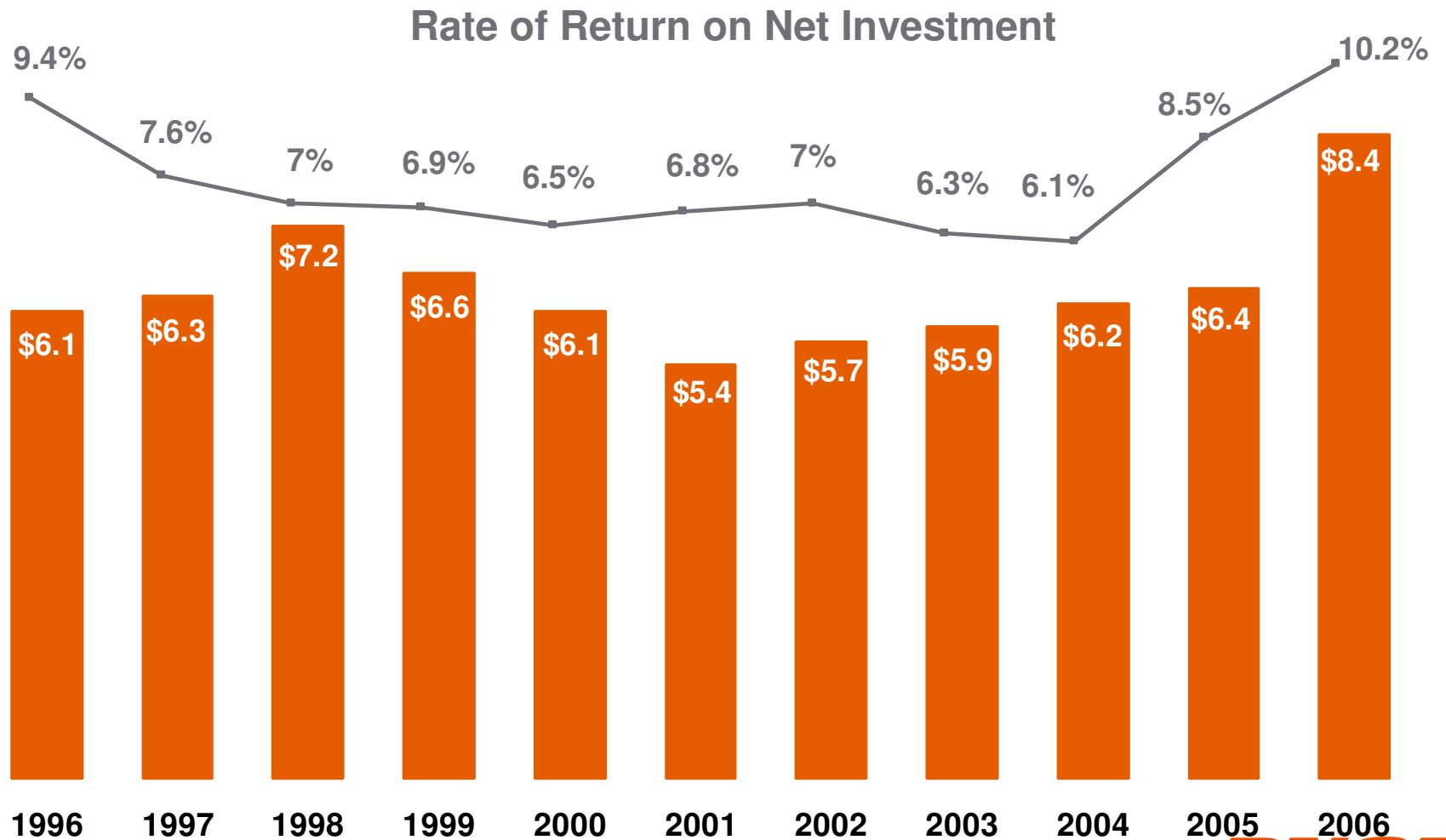
2.9% CAGR



Source: AAR

Railroad industry capital expenditures

\$ Billions



Source: AAR

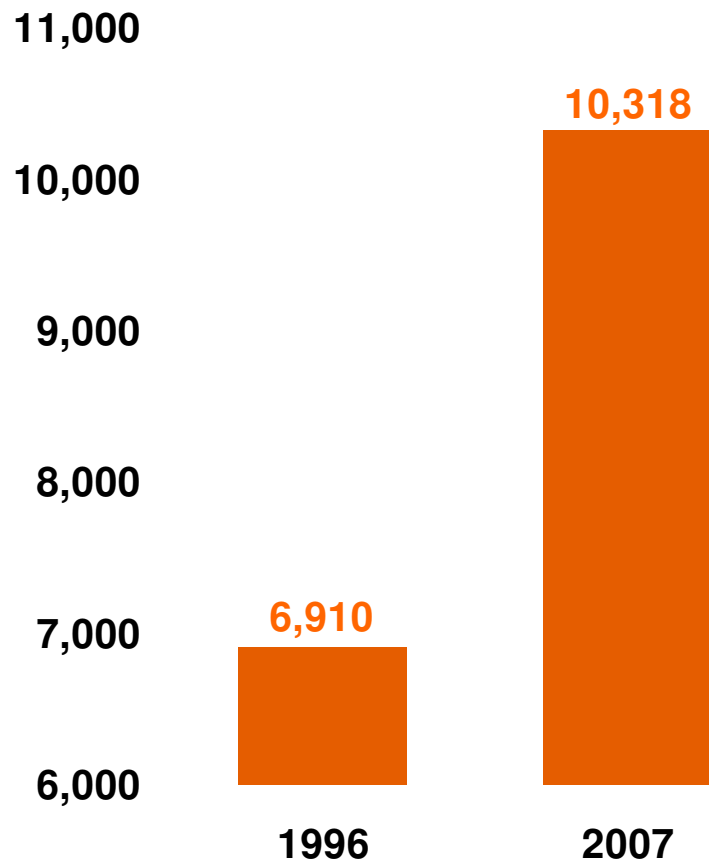
BNSF
RAILWAY

What is driving rail demand

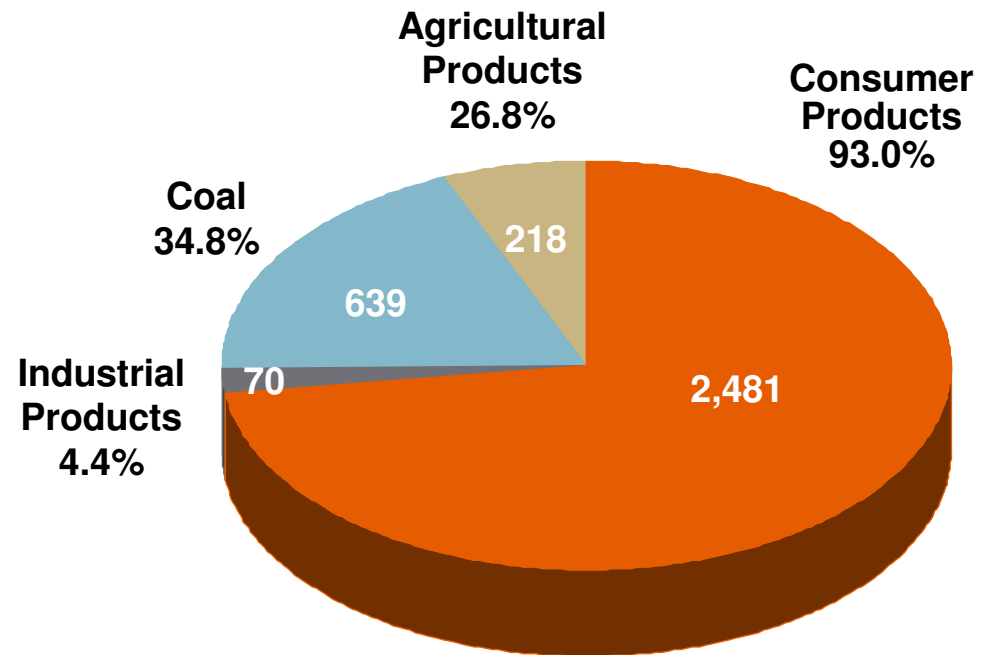


BNSF volume growth

BNSF Volume (000s)



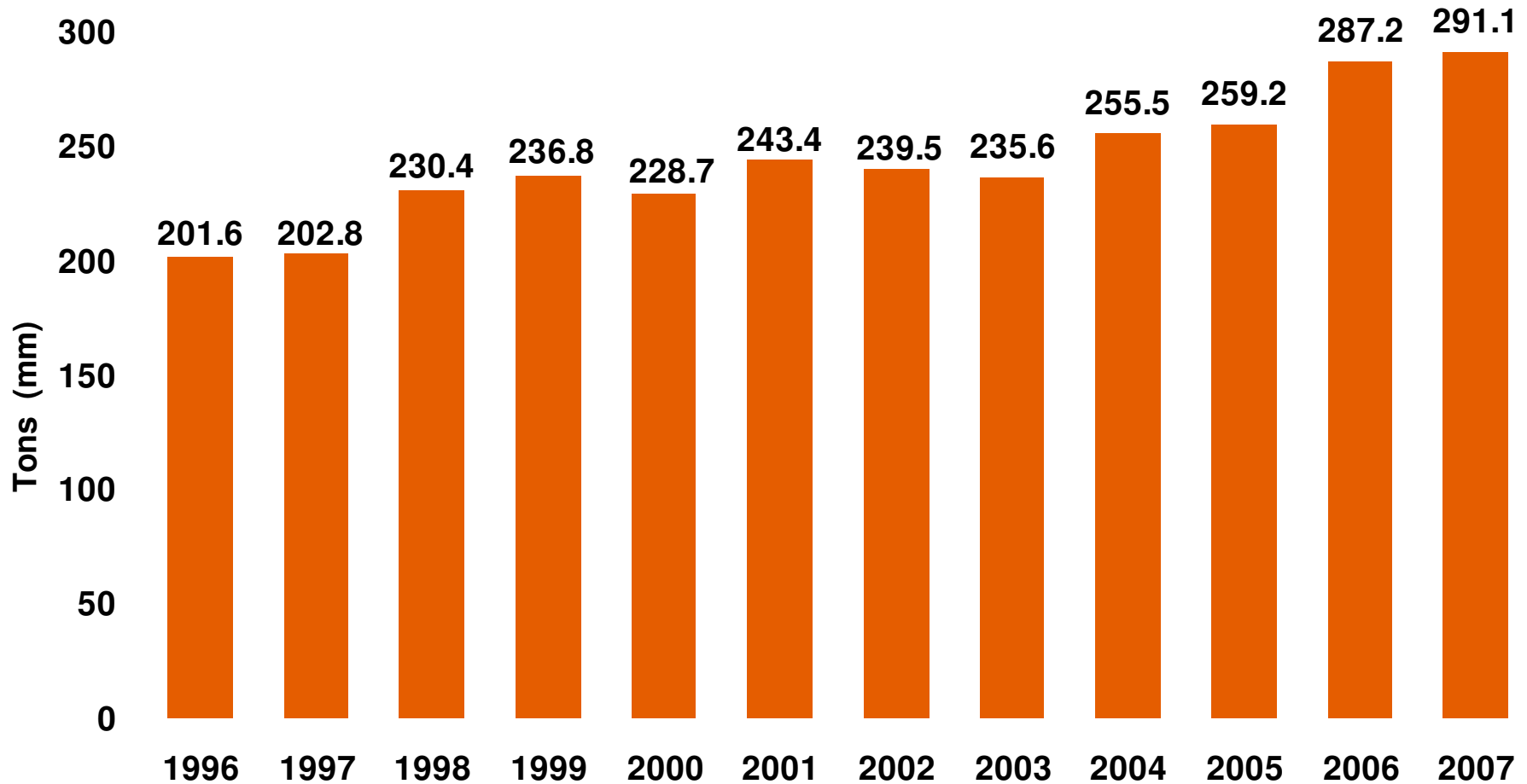
Δ 1996 - 2007 (000s)



+ 3.4 million units; +49.3%

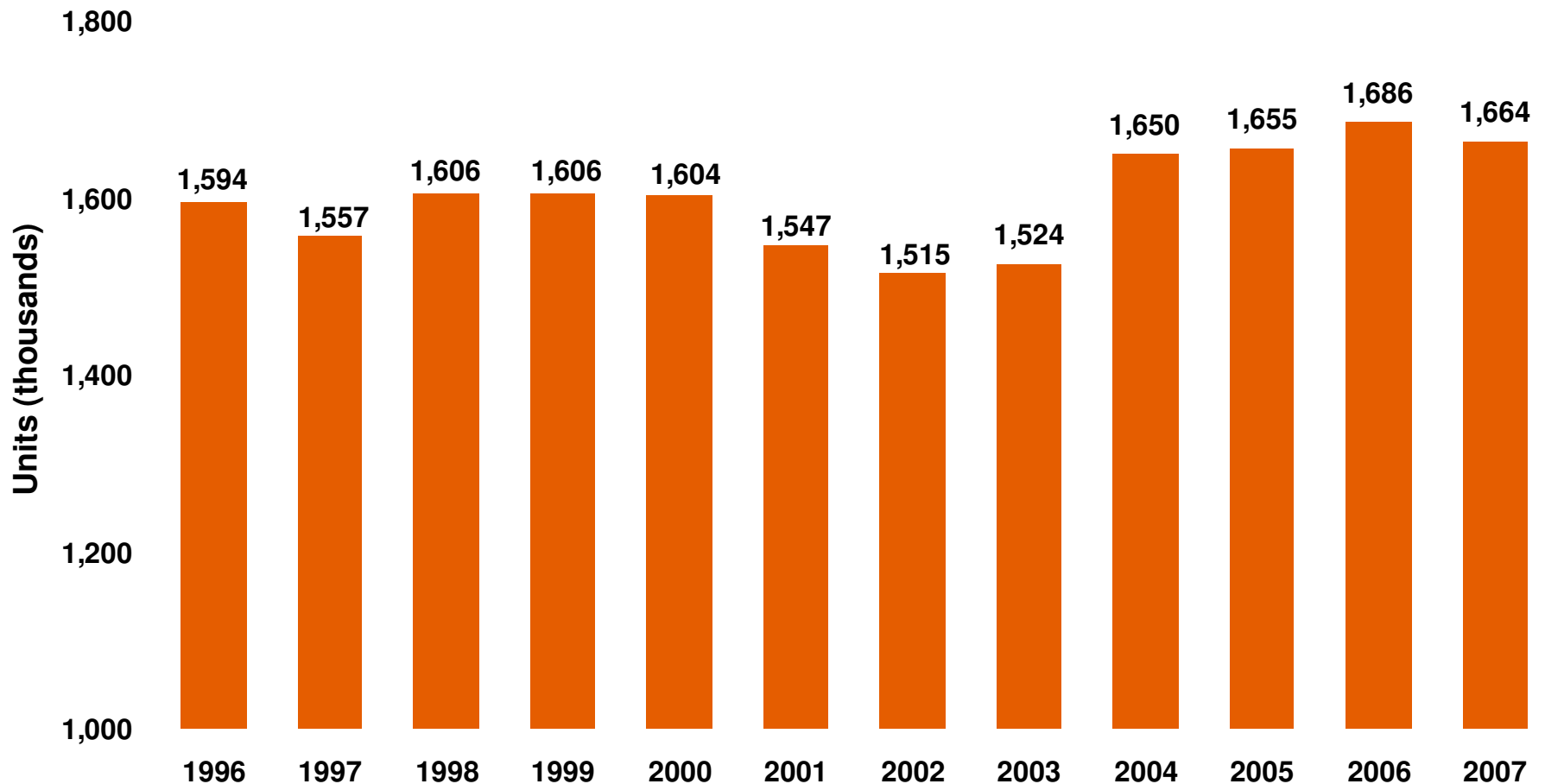
BNSF Coal Tons

3.4% CAGR



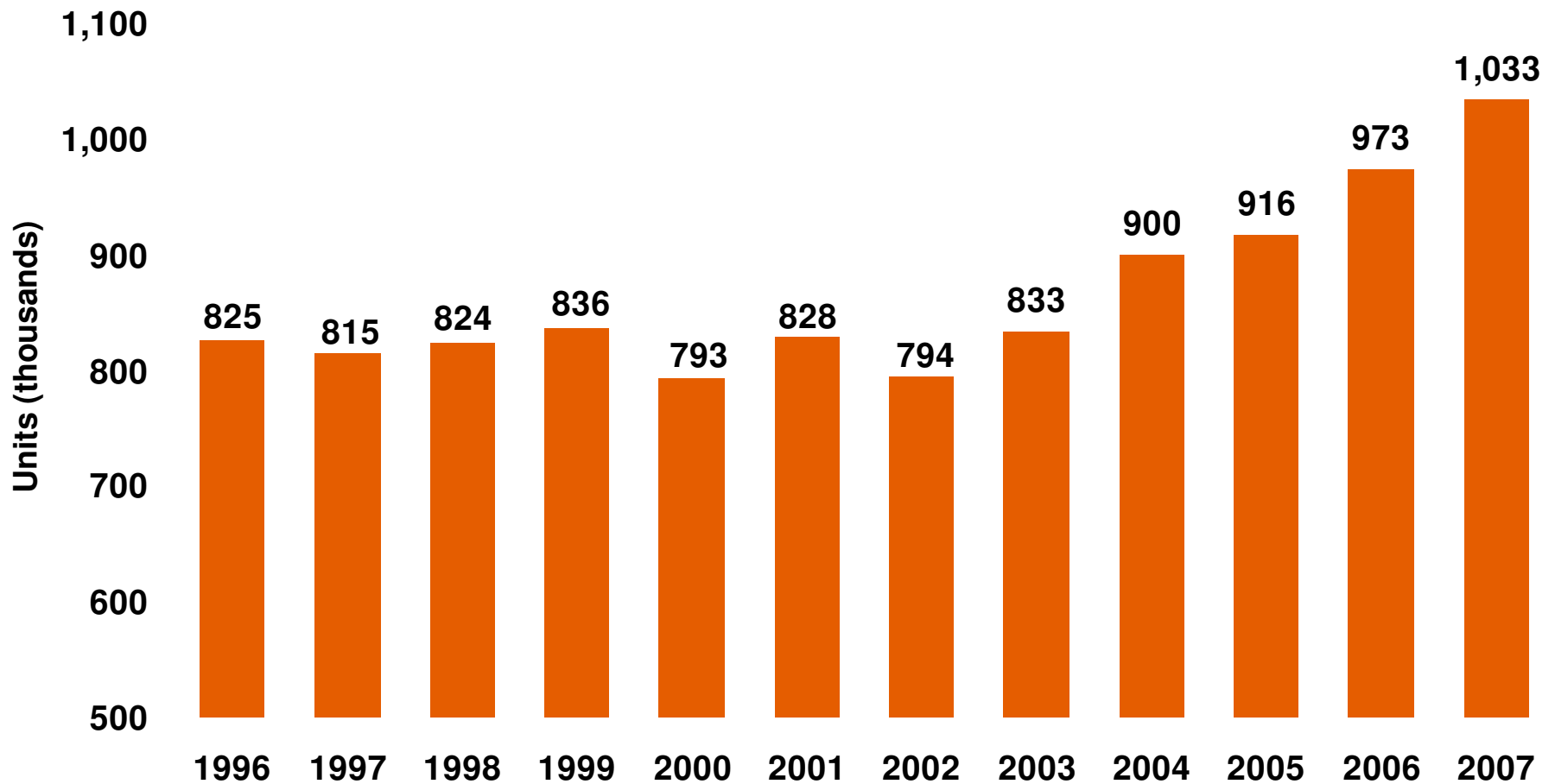
BNSF Industrial Products Volume

0.4% CAGR



BNSF Ag Volume

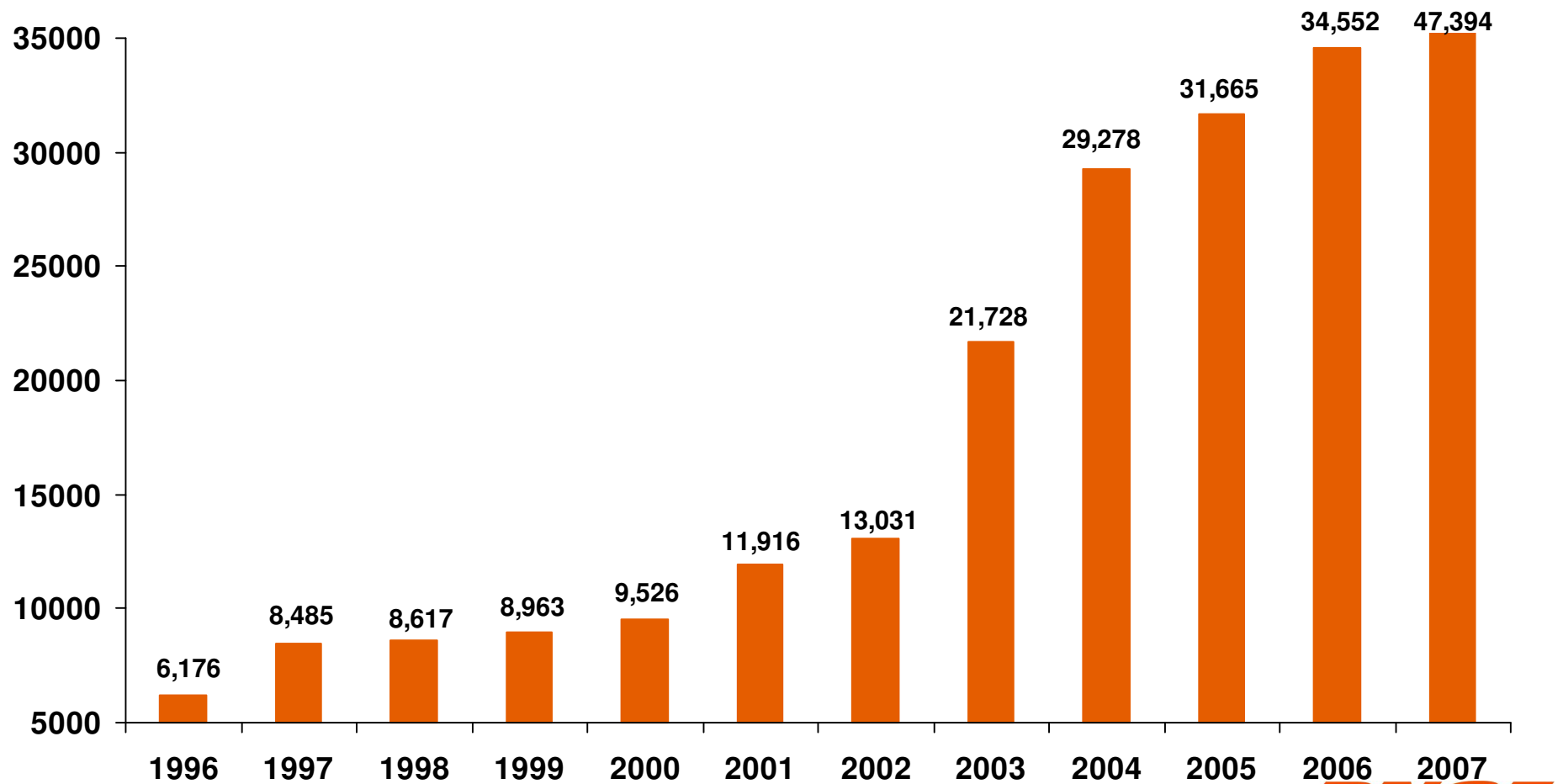
2.1% CAGR



BNSF Ethanol Volume

20.4% CAGR

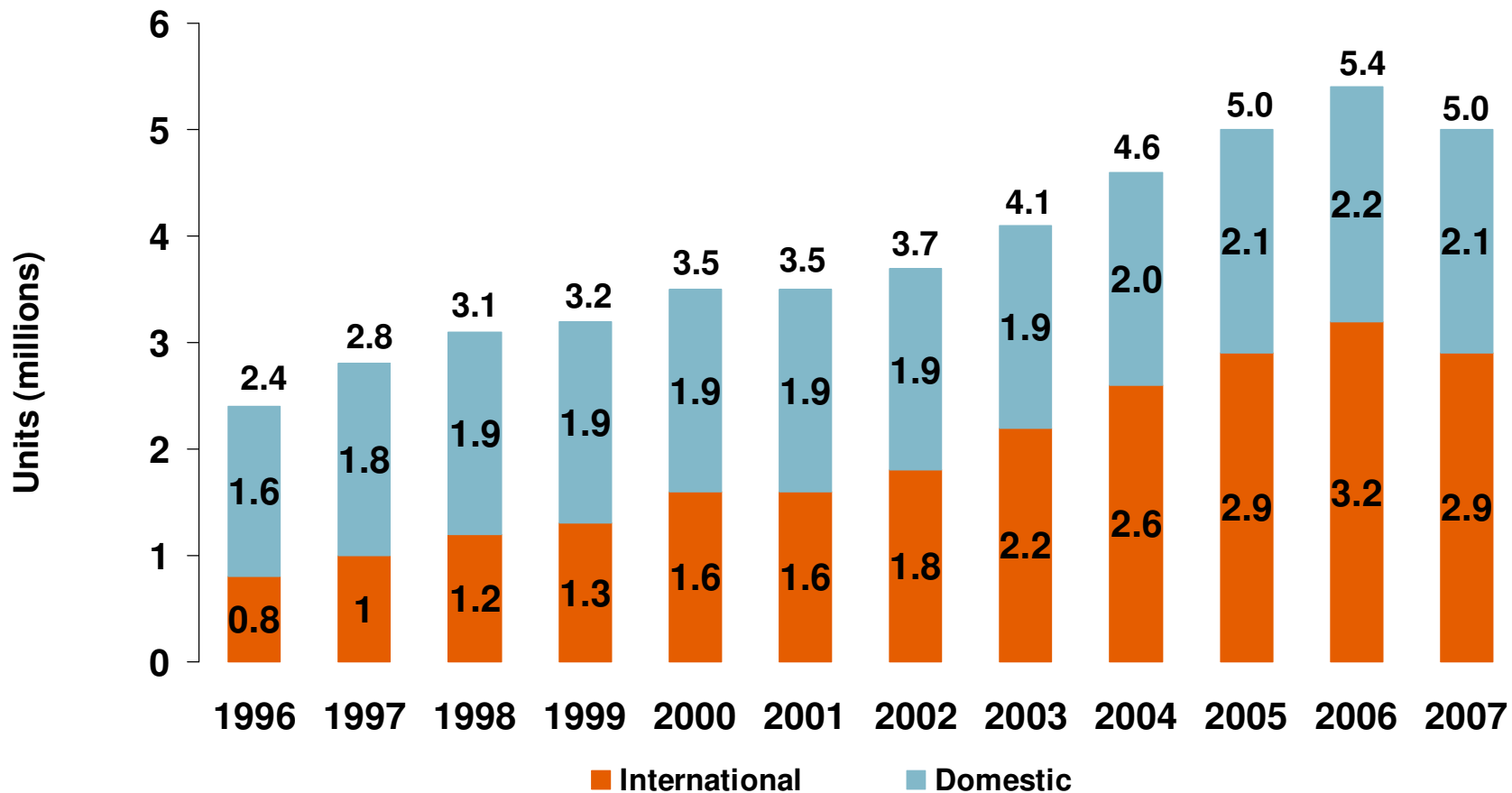
Units



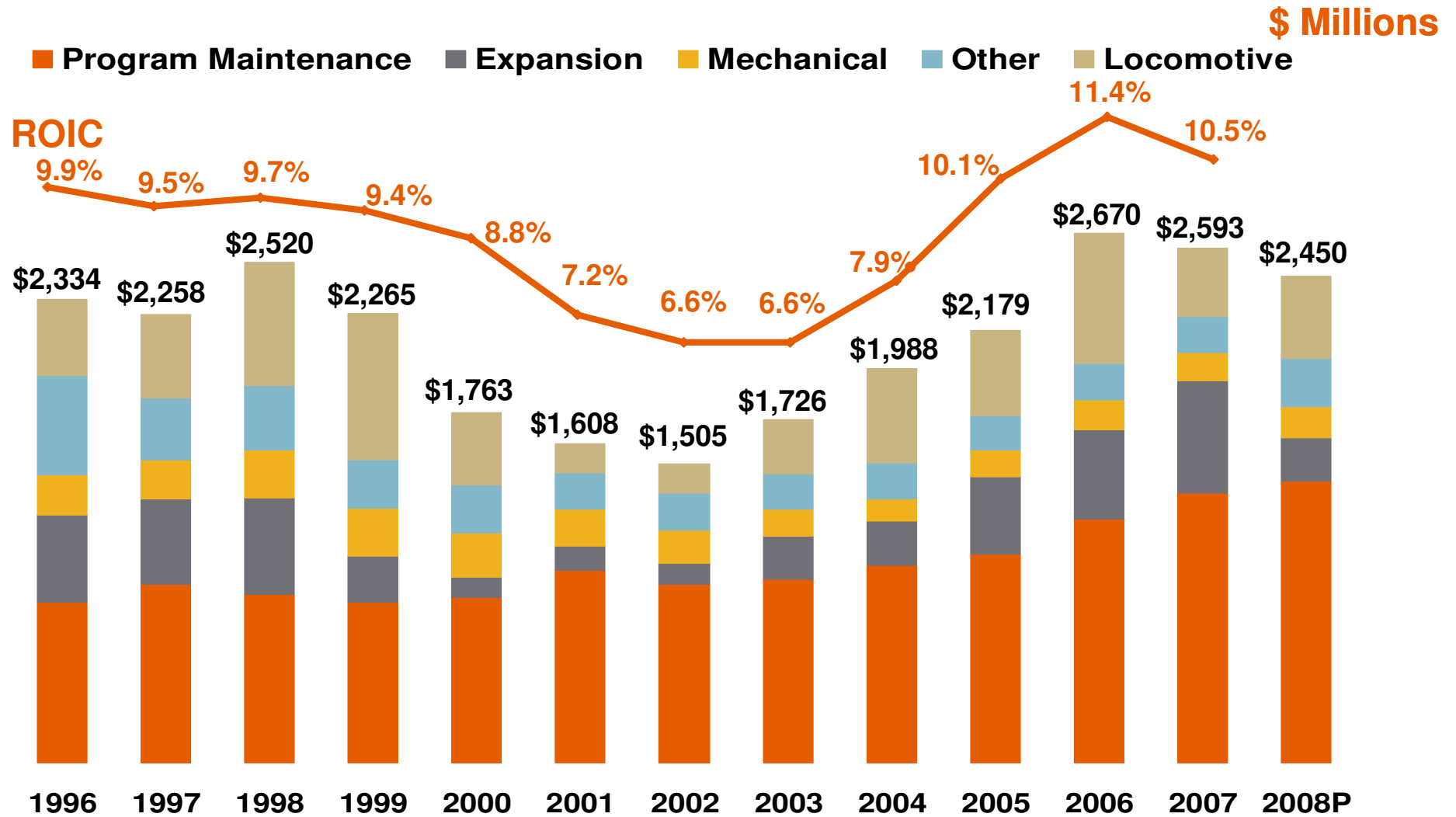
BNSF Intermodal Volume

12.1% CAGR International

2.4% CAGR Domestic



BNSF capital commitments with ROIC



Transportation at the crossroads...

2020 Growth Projections

Population	338 million, 0.87% CAGR
Vehicle miles traveled	4.09 trillion, 8.13% CAGR
Rail gross ton miles	1.82 trillion, 1.94% CAGR
Truck ton miles	4.17 trillion, 1.96% CAGR
Port volume	58 million TEUs, 5.4% CAGR



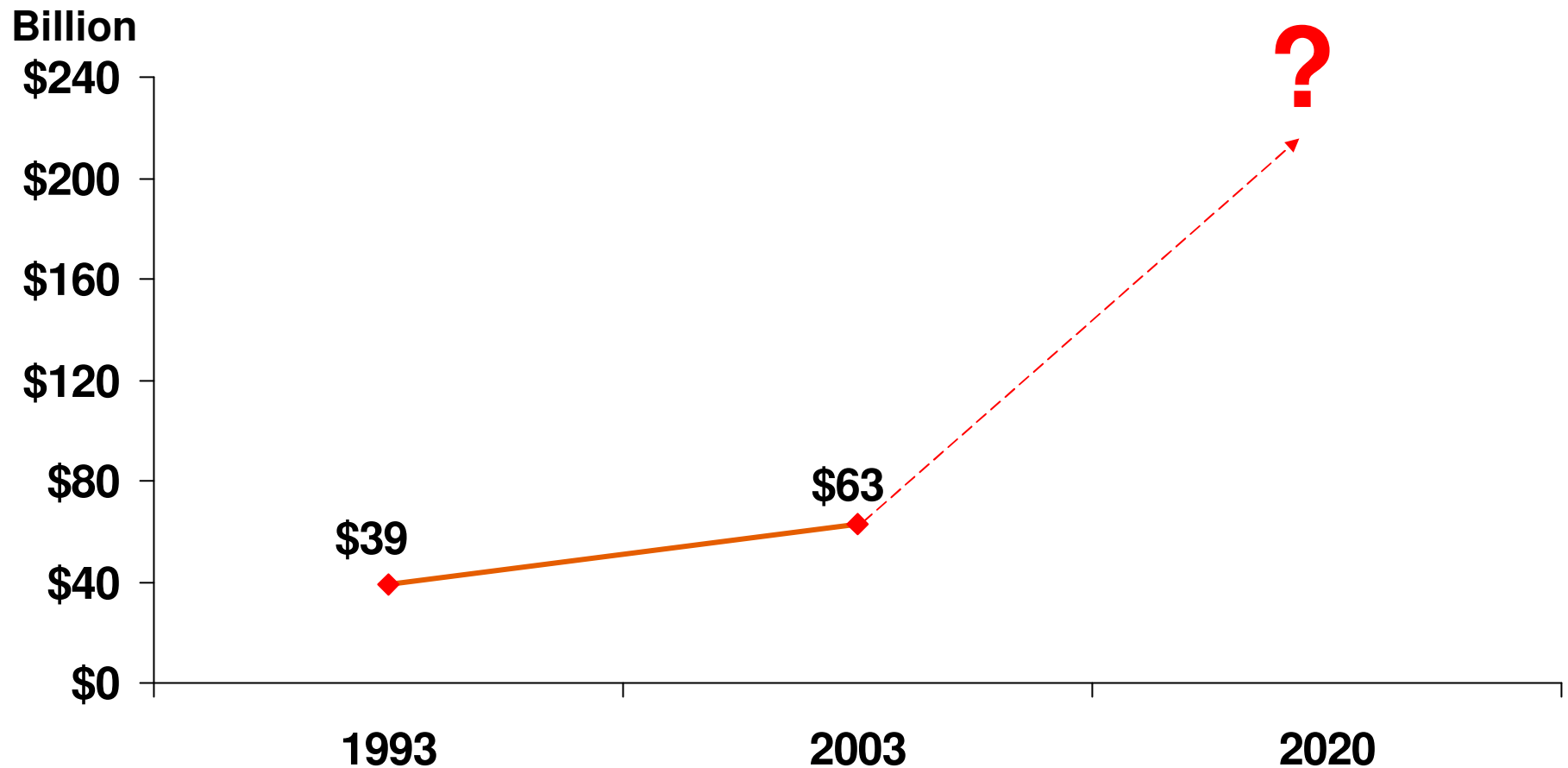
Transportation growth and capacity: The past 25 years

1980-2005

	Route Miles	Growth
Rail	(39%)	65% GTM
Highway	+7%	96% VMTs
Ports	N/A	400% TEUs

What is this costing the economy?

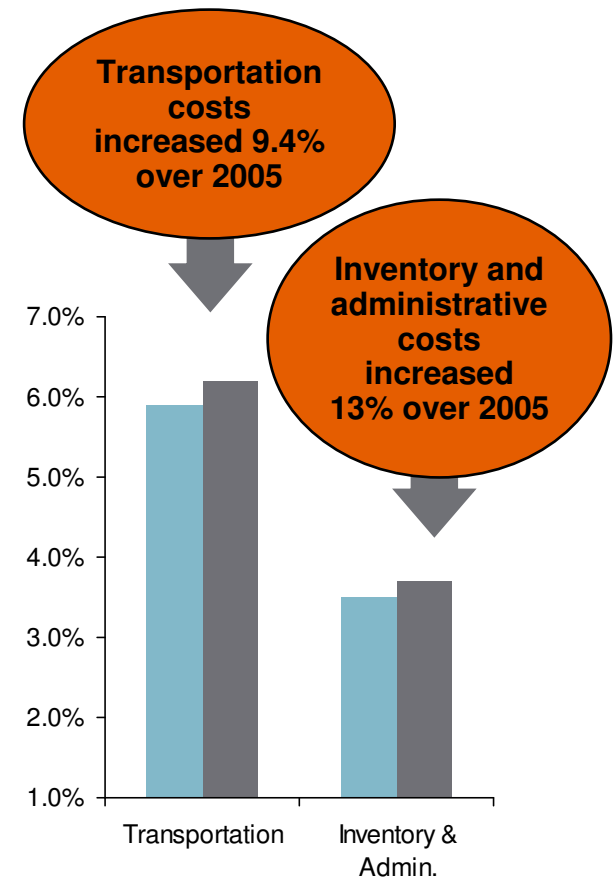
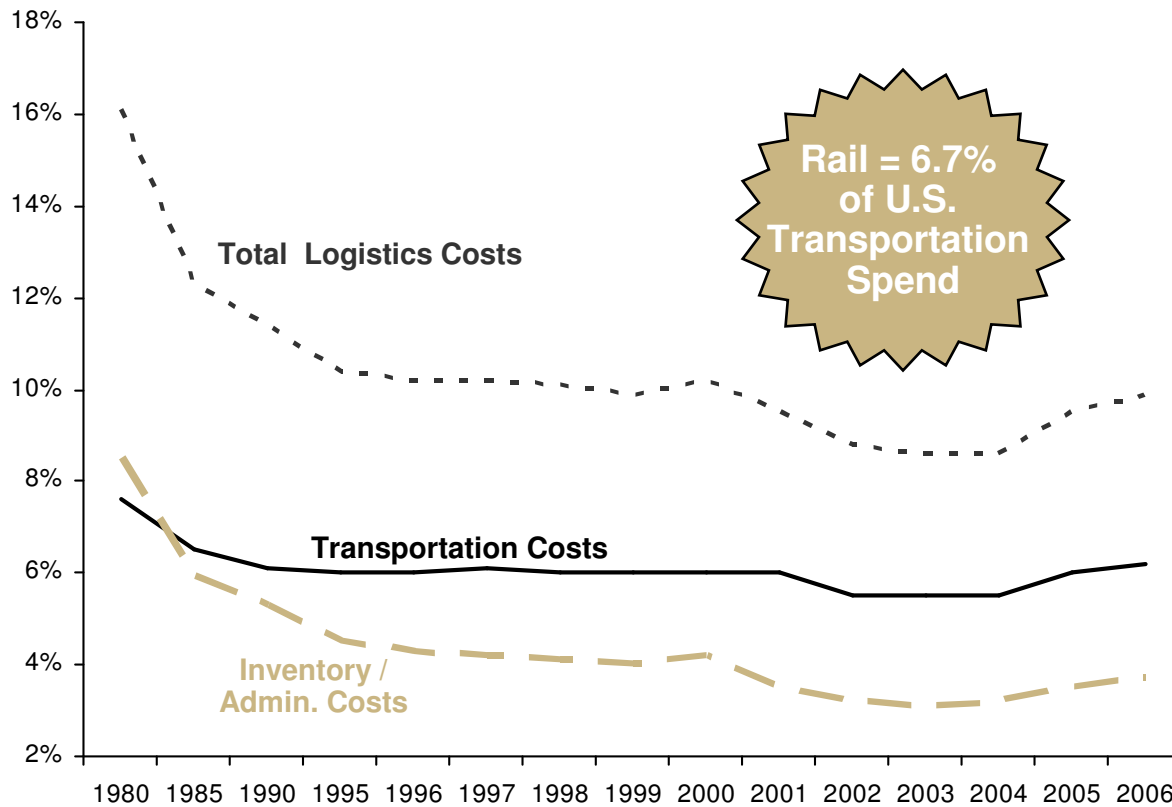
Cost of highway congestion



Source: Texas Transportation Institute and U.S. DOT

What is the cost to the supply chain?

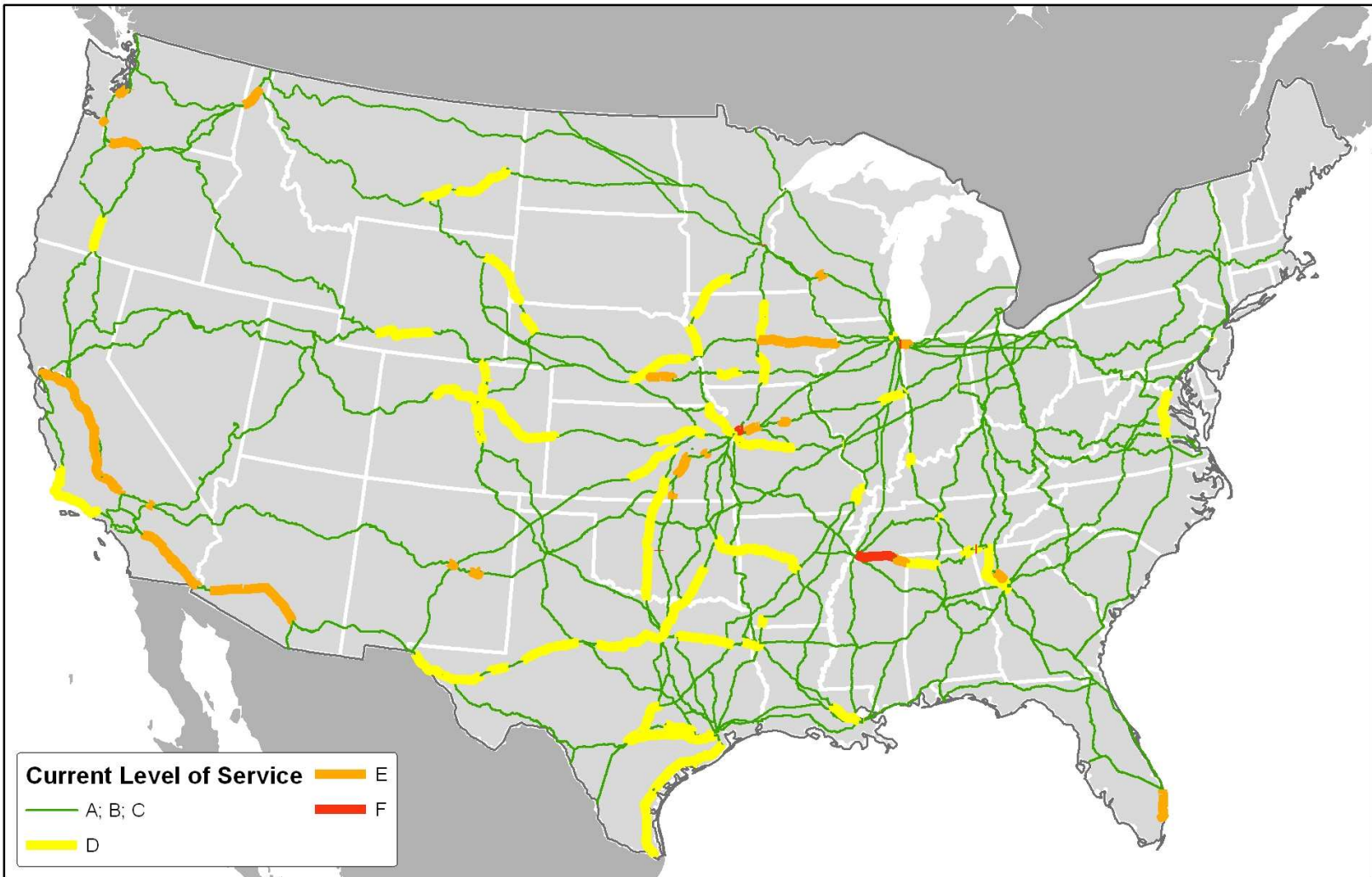
U.S. Logistics Costs as a Percent of GDP



Source: Annual State of Logistics Report, Council of Supply Chain Management Professionals

Majority of current routes are operating below practical capacity levels

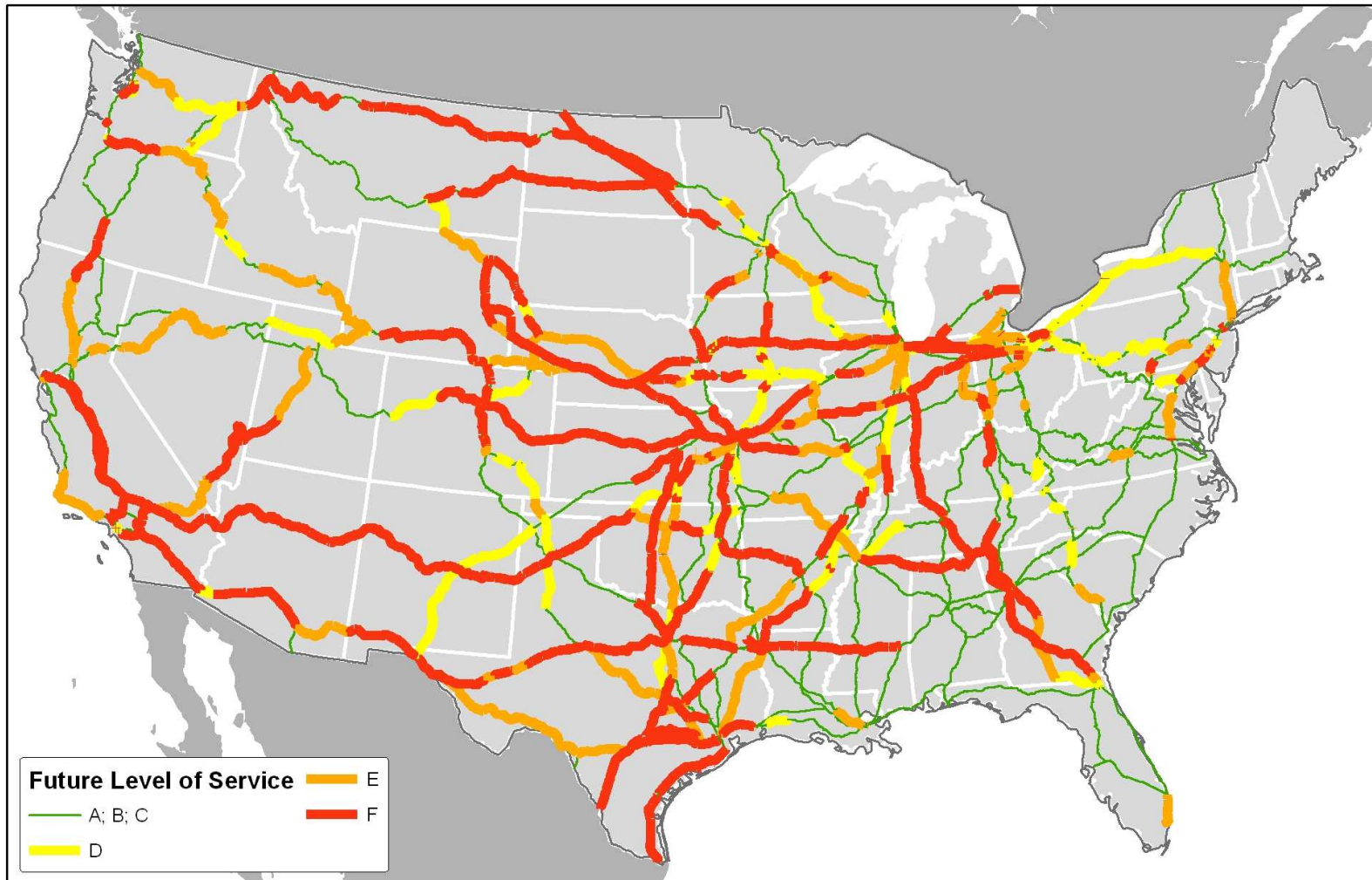
Current Corridor Volumes Compared to Current Corridor Capacity



Source: National Rail Freight Infrastructure Capacity and Investment Study September 2007

Without capacity improvements, congestion would affect nearly every region of the country

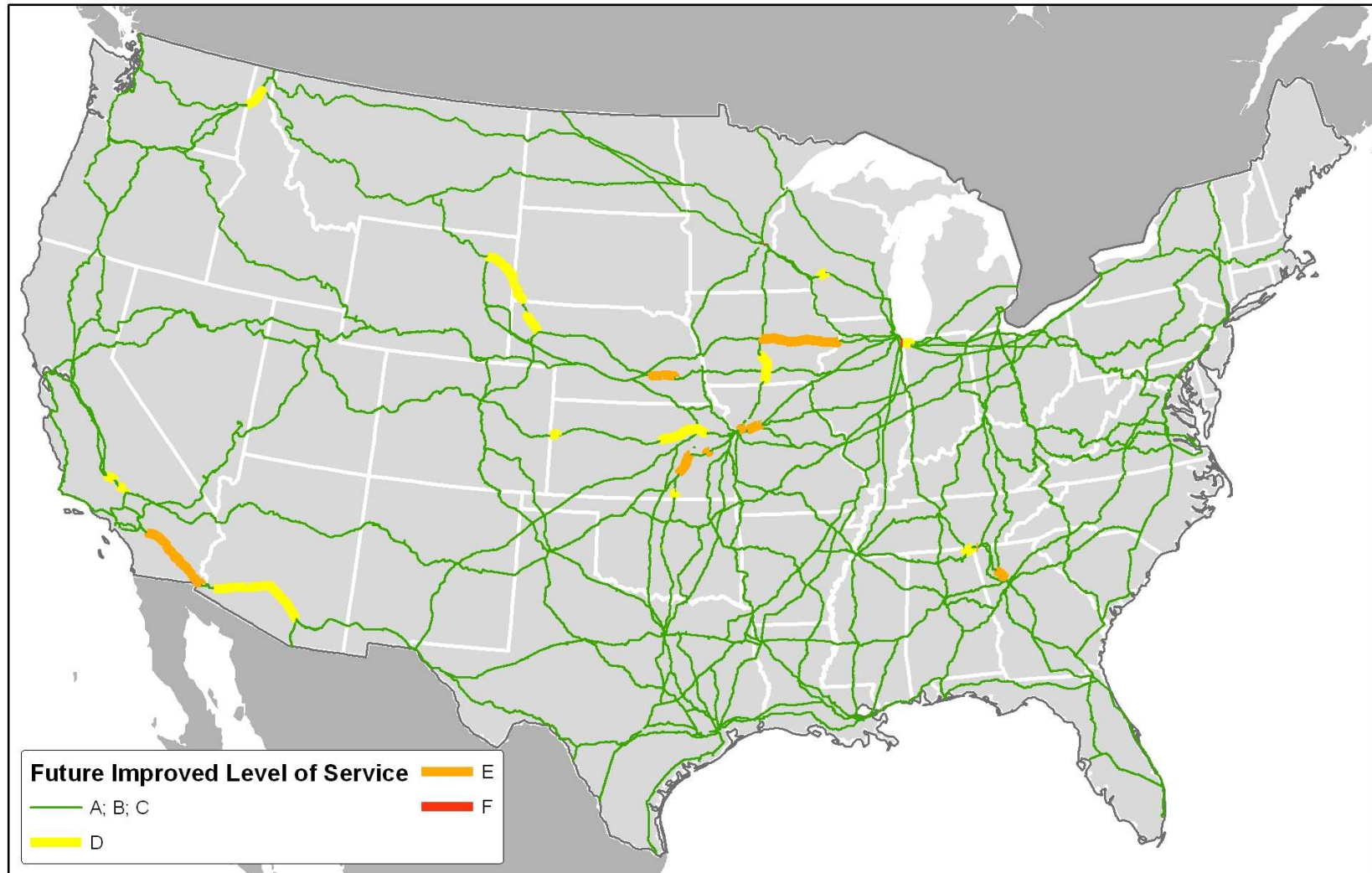
Future Corridor Volumes Compared to Current Corridor Capacity 2035 Without Improvements



Source: National Rail Freight Infrastructure Capacity and Investment Study September 2007

But with the right investments, rail can accommodate future demand

Future Corridor Volumes Compared to Future Corridor Capacity 2035 with Improvements

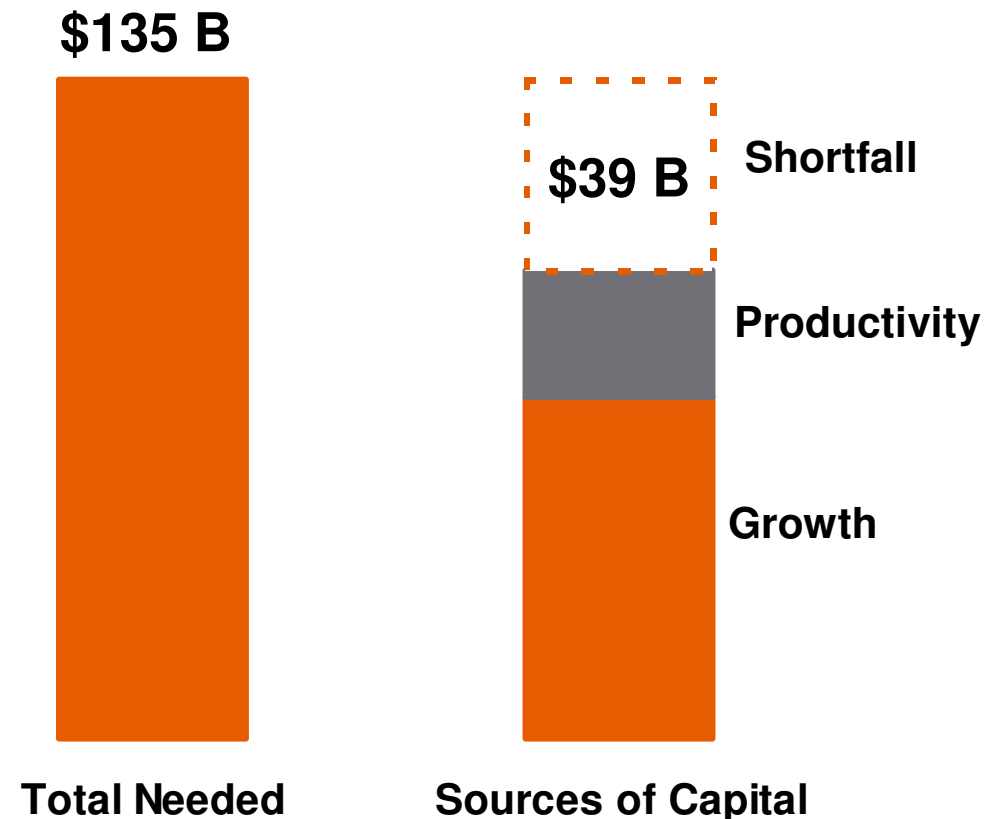


Source: National Rail Freight Infrastructure Capacity and Investment Study September 2007

Railroad capacity: AAR/Cambridge study

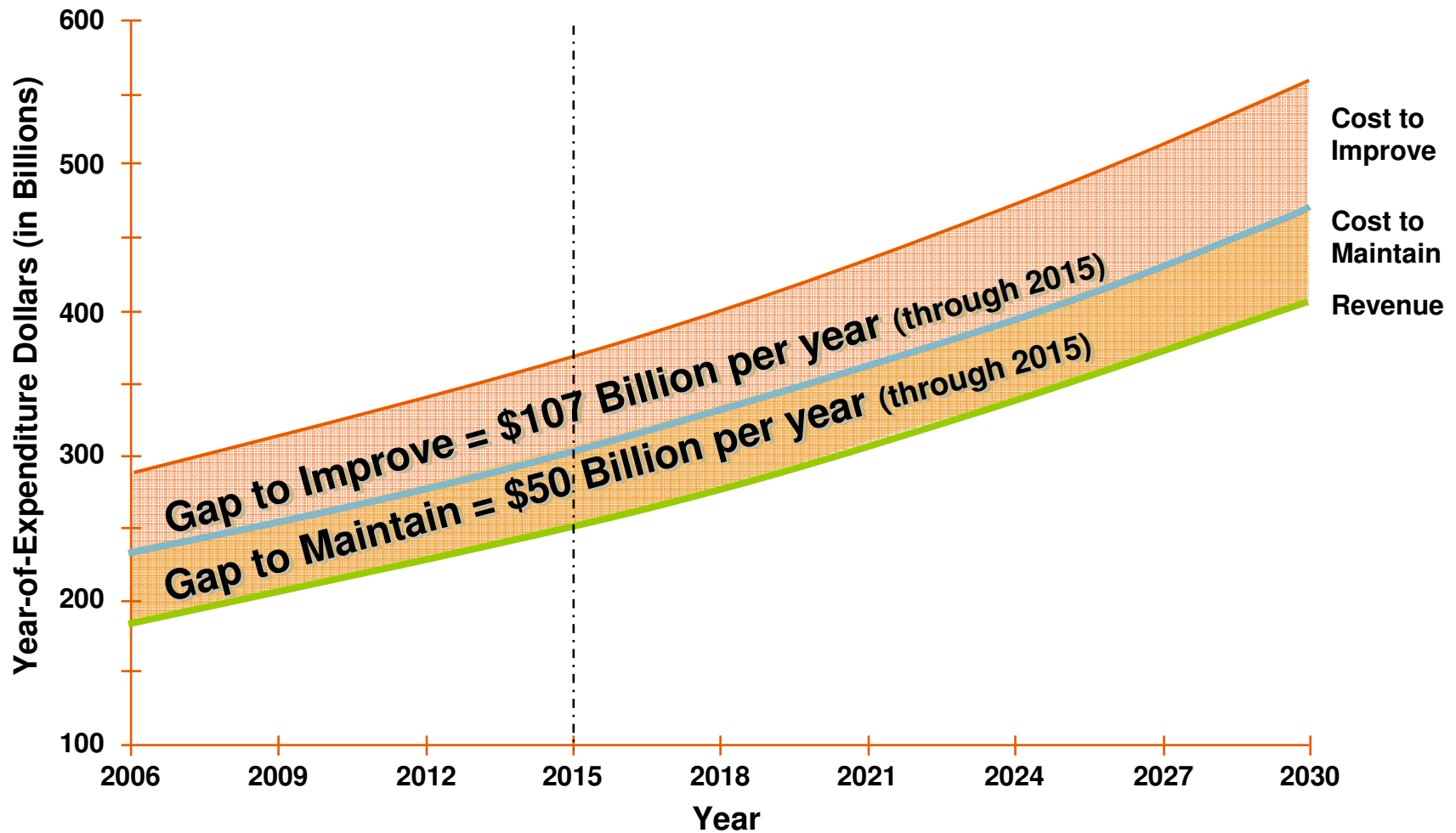
- Assessed long-term capacity needs of primary rail freight corridors
- Assumed no shift in modal tonnage shares among rail, truck and water beyond those projected by U.S. DOT
- \$39 billion shortfall will occur without a stimulus to bring investments up sooner in their cycle

Class 1 capital investments needed to meet 2035 volume demand



Source: National Rail Freight Infrastructure Capacity and Investment Study September 2007

National funding gap



Source: U.S. Chamber of Commerce

Overview of Commission findings

REFORM

- Outcome-driven (not political) funding
- Streamline 108 federal programs to 10
- Speed project delivery

REBUILD

- State of “good repair”
- Mode Neutral

REVENUES

- Increased funding from all sources to meet \$225 - \$349 billion a year in needs

Reform Federal Programs

More than 100
Federal Programs
Consolidated into 10



1. Rebuilding America
2. Freight Transportation
3. Congestion Relief
4. Saving Lives
5. Connecting America
6. Intercity Passenger Rail
7. Environmental Stewardship
8. Energy Security
9. Federal Lands
10. Research, Development and Technology

What does this mean to the rail industry?

- “Rational regulation” is necessary
- National Freight Program
- Freight rail is an important part of meeting environmental stewardship and energy security goals
- Passenger rail in key corridors, not at the expense of freight capacity
- Funding options
- Investment Tax Credit

“Rational regulatory policy prevails”

This principle applies to economic regulation, but also safety, security and pre-emption

“Ensuring the necessary free flow of capital into the rail industry and other private sector providers of transportation requires that regulatory policies promote efficient operations and encourage investment. National networks require uniform and national regulatory structures to further ...commerce.”

Developing a national freight program

- **Should facilitate public investment in crucial, high cost transportation infrastructure public-private projects with national and regional benefits. E.g.,**
 - **Rail corridor development**
 - **Intermodal connectors**
 - **Key interstate highways, near port facilities**
 - **Strategic national rail bridges**
 - **Train control technology**
 - **Green intermodal facilities and operations**

Environment and Energy

- **If there is GHG regulation, freight and passenger rail should be a beneficiary**
- **There should be additional programmatic opportunities to transition to “greener” rail operations**

Intercity Passenger Rail (ICPR)

- **The old Amtrak deal will not work for the future- the public must pay for capacity to facilitate passenger rail**
- **The Commission affirmed that freight capacity/operations must not be injured by passenger rail**
- **Focus on corridors of 500 miles or less; “comparable to world-class systems;” Cost benefit analysis**
- **Track access and cost of present and future capacity requirements negotiated by freight and passenger rail interests**
- **Performance measures: developed in consultation with freight railroad, investment scoped to meet service criteria**
- **Rights of way to be developed to allow for separate passenger and freight operations**

How to fund the infrastructure: Role of public private partnerships

- **Standardize public benefit ROI methodology for evaluating and negotiating PPPs between railroads, state, local and federal interests to ensure that the public and private sectors pay for their own benefits.**
- **Ensure no misallocation of public funding to projects which would require non-economic private investment.**
- **Ensure that grants/loans/public financing for rail-related projects does not supplant or diminish private investment.**

Funding, continued

- **If a freight fee is considered...**
 - **Link and dedicate as directly as possible to use**
 - **Predictable, dedicated and sustained, and pay-as-you-go**
 - **Non-discriminatory**
 - **Ultimate consumer bears the cost**
 - **Nationally coordinated**

Revenue: Freight Rail Infrastructure Capacity Expansion Act of 2006 (ITC)

- **Freight Rail Infrastructure Expansion**
 - **25% investment tax credit and expensing of residual cost**
 - **Expansion defined as investment in infrastructure where it does not currently exist (e.g. double tracking; signaling of dark territory)**

Warnings ahead...

- **Public will not accept higher fuel taxes or other fees if the system is not overhauled**
- **Shippers will not accept user fees unless principles around investment are fair and transparent, i.e. – intermodal shippers should not pay for coal capacity and vice versa**
- **Railroads will not accept public funds with obligations not central to the investment if strings are attached**
- **The lack of action will result in a further degradation of our transportation efficiency and ultimately our global competitiveness**

BNSF
RAILWAY