National Rural Transportation Conference
August 24 – 26, 2011
Washington, DC

RPO AMERICA PEER SYMPOSIUM: SHARING INNOVATIONS IN REGIONAL TRANSPORTATION PLANNING

Presented by David Cole,
Former Commissioner, Maine DOT

Today's Presentation: A P3 approach

1. FORCES SHAPING TRANSPORTATION POLICY
2. REGIONAL ROLE IN MAINE DOT PLANNING
3. INNOVATION ON A PROJECT LEVEL

A P3 APPROACH

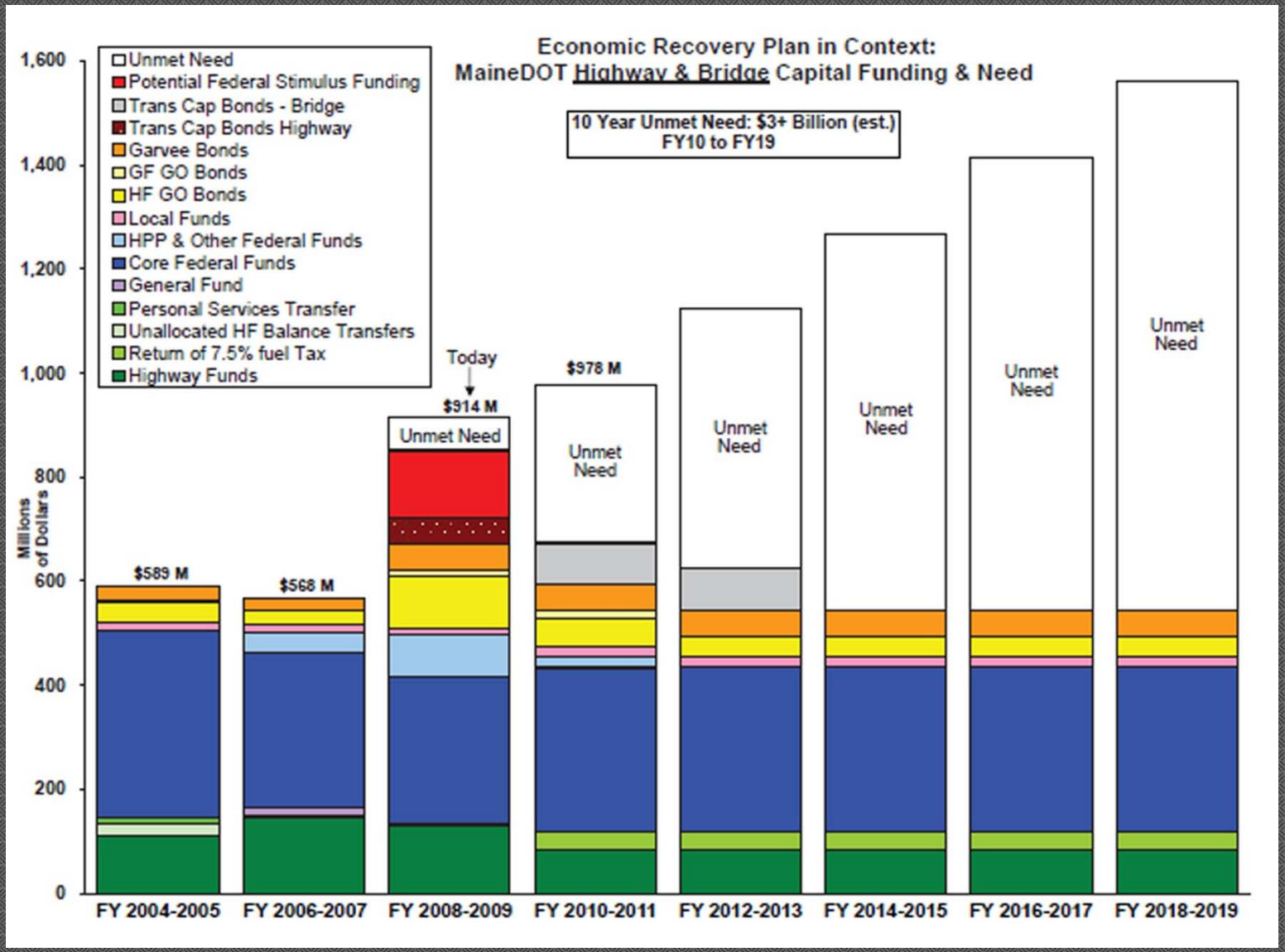
PART 1:

FORCES SHAPING TRANSPORTATION **POLICY**

Forces Shaping Transportation Policy

- 1.Funding levels and uncertainties
- 2. Condition and functionality of the system
- 3. Public involvement and expectations

Maine DOT's 10 Year Unmet Need: $3+ Billion (est.)



Source: MaineDOT

The Macro Level Approach

Courtesy of MaineDOT

Headlines

neweurope

Germany's new boom: making money by making stuff

While the UK and US increasingly relied on the financial sector, Germany concentrated on manufacturing

Tweet 211
Share 2115
reddit this

Larry Elliott in Munich
guardian.co.uk, Monday 14 March 2011 22.00 GMT
Article history

A larger | smaller

World news
Germany · Europe

Business
Economics · Global economy · Automotive industry

Series
New Europe: Germany · New Europe

More from New Europe: Germany on

World news
Germany · Europe

Headlines

The Portland Press Herald

Enter topic to look up

June 25

Obama urges 'renaissance in manufacturing'

The president continues his visits to promote and boost the U.S. economy with a trip to Pittsburgh.

The Associated Press

PITTSBURGH - President Obama called on Friday for a "renaissance in American manufacturing" that would replace shuttered steel mills with plants producing robotics, nanotechnology and other high-tech advances.

The president said this resurgence is how the country will create new jobs and stay competitive in a global marketplace where other countries are making great strides.

Speaking at Carnegie Mellon University in Pittsburgh, a city that's taken hits from the decline of traditional manufacturing sectors like steel, Obama called for a joint effort by industry, universities and the federal government to help reposition the United States as a leader in cutting-edge manufacturing.

"We have not run out of stuff to make, we've just got to reinvigorate our manufacturing sector so that it leads the world the way it always has, from paper and steel and cars to new

President Obama speaks Friday in

click image to enlarge

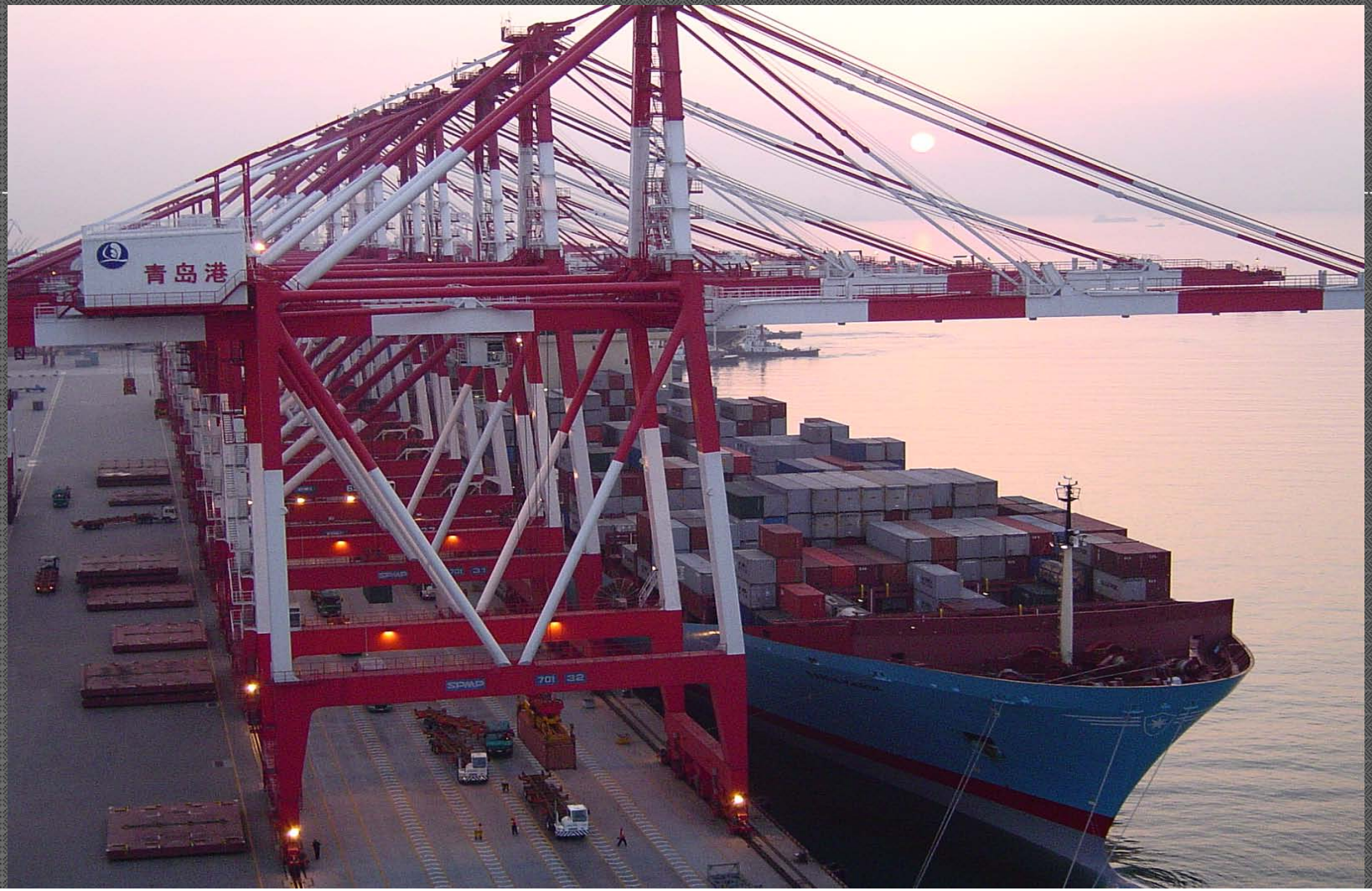
Headlines

Port Authorities say freight infrastructure can't handle doubling exports

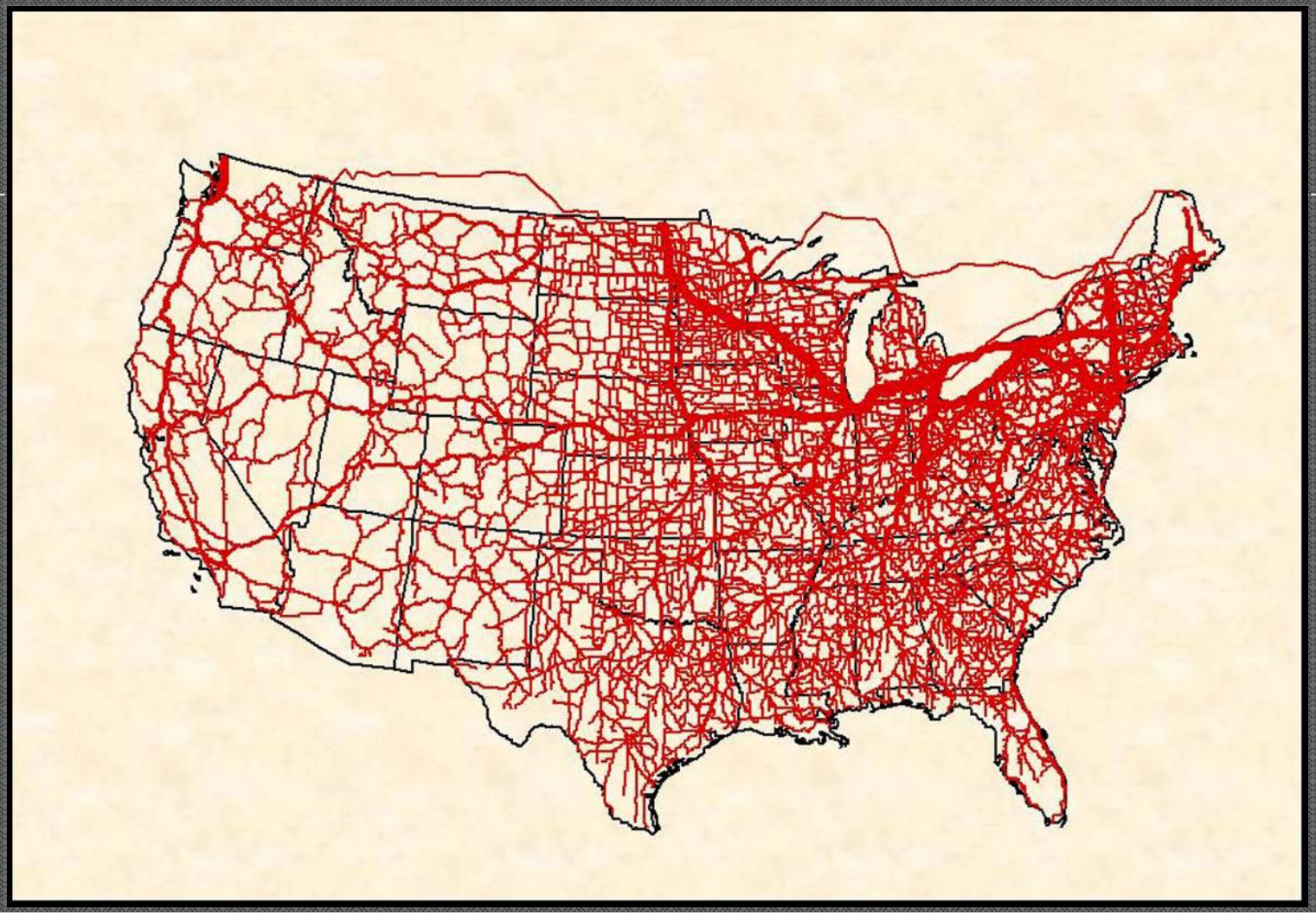
Members of the American Association of Port Authorities (AAPA) testified yesterday at a U.S. Senate Finance subcommittee hearing that the most significant constraint faced by seaports for increasing U.S. exports is the capacity and efficiency of the nation's freight transportation infrastructure. The Subcommittee on International Trade, Customs and Global Competitiveness asked if U.S. seaports are ready to meet the goal set by President Obama of doubling U.S. exports over the next five years. According to the AAPA, while the ports have the capacity for higher volumes, the country's highways, bridges, railroads, vessel navigation and marine terminal infrastructure are not up to the task.

The "transportation bottleneck" is one choice in the Datamyne one-question survey: What's the biggest obstacle to exporting for U.S.

Global Trade



Projected Truck Traffic on U.S. Highway Network 2020



Source: US Federal Highway Administration

The Micro Level Approach

- Determine Regional Distinctions
- Define Local Economic Drivers
- Seek Context-Sensitive Transportation Solutions
- Enhance "Quality of Place"
- Integrate Land-use / ED / Transportation
- Foster "Creative Economy" Opportunities

Courtesy of MaineDOT

A P3 APPROACH

PART 2:

REGIONAL ROLE IN MAINE DOT **PLANNING**

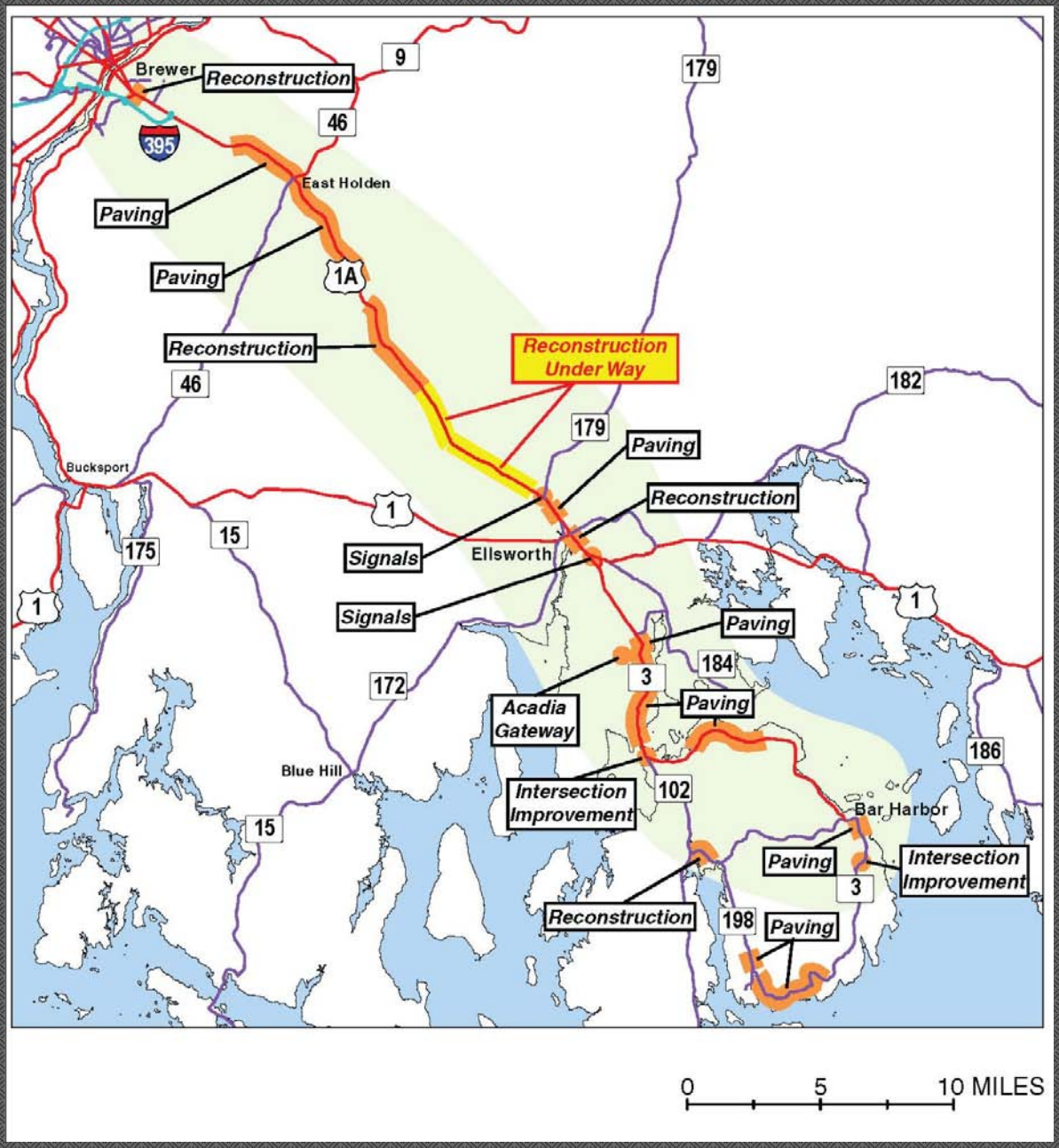
CONNECTING MAINE: PROCESS

- User survey (2003)
- Focus group meetings (2004)
- Regional transportation assessments (2005)
- CREST designations (2005)
- Future visions workshops (2005)
- Regional forums (2005)
- Regional strategic investment plans (2006)
- Public consultation meetings (2007)
- Final draft public comments (2008)

Source: Connecting Maine

Acadia Express CREST

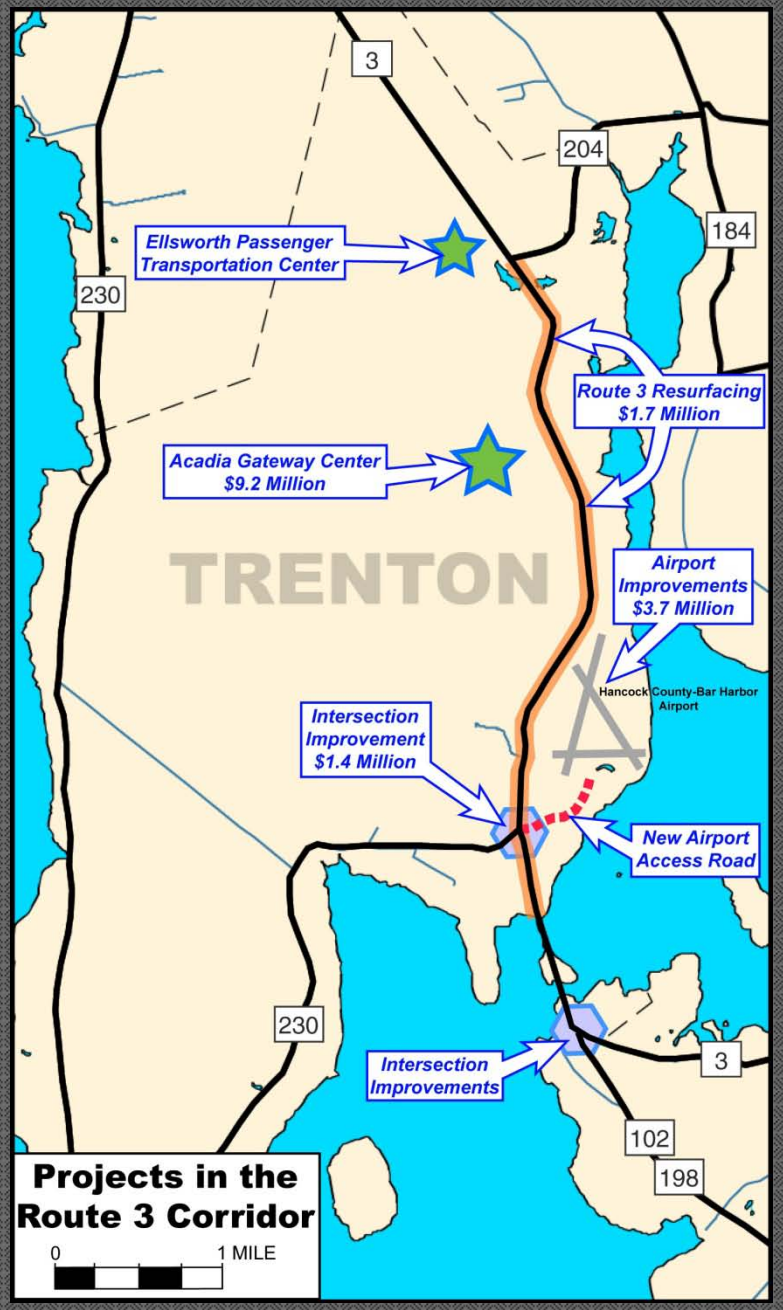
I-95 to Bar Harbor



Courtesy of MaineDOT

Acadia Gateway Center

Ellsworth STAR Center



Courtesy of MaineDOT

Regional Study on Transportation Deficiencies and Barriers to Growth - Congressionally Funded

Courtesy of MaineDOT

First new US-Canadian border crossing in 30 years
Calais • St. Stephen

Courtesy of MaineDOT

New Calais/St. Stephen Border Crossing

- New crossing discussed for about 30 years
- 8th busiest commercial crossing along the U.S. / Canadian border
- Annual traffic – 2.9 million vehicles
- 7,500 AADT including 550 heavy trucks
- Delays inbound to the U.S. can be up to 2 hours
- Truck traffic entering Maine has doubled since NAFTA implementation (70,000 to 140,000 annually)

Courtesy of MaineDOT

A P3 APPROACH

PART 3:

INNOVATION ON A **PROJECT** LEVEL

Bridge opens in 2006 –
42 months from concept to completion

Courtesy of Cianbro Corp.

Waldo-Hancock Bridge during initial reconstruction work: spring 2002

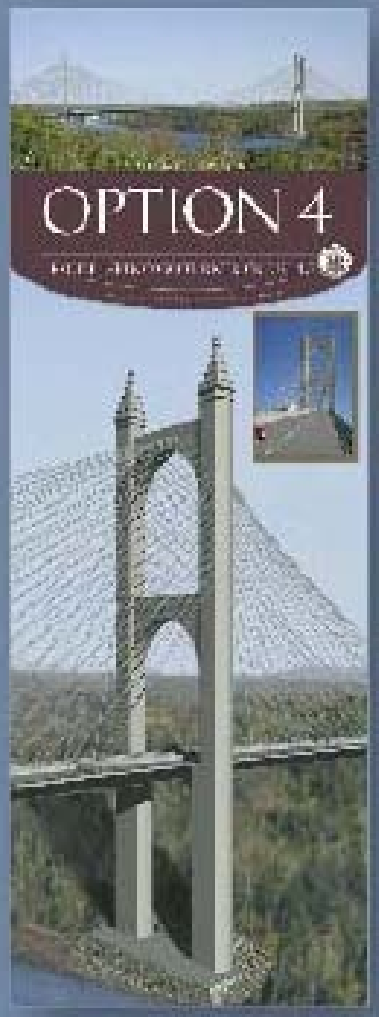
Courtesy of MaineDOT

June 2003: Corroded suspension cables on Waldo-Hancock Bridge

Courtesy of MaineDOT

Sept. 2003: Replacing a historic bridge – community feelings run high

Option 1



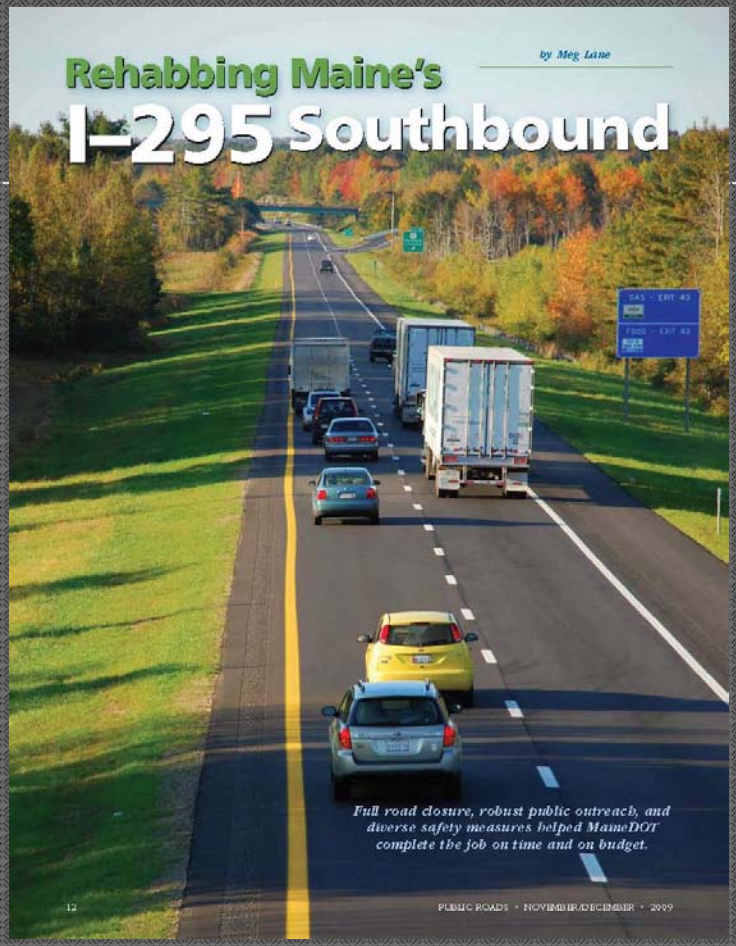
Option 4

Courtesy of MaineDOT

Observation Deck (Vertical Trail)

Courtesy of MaineDOT

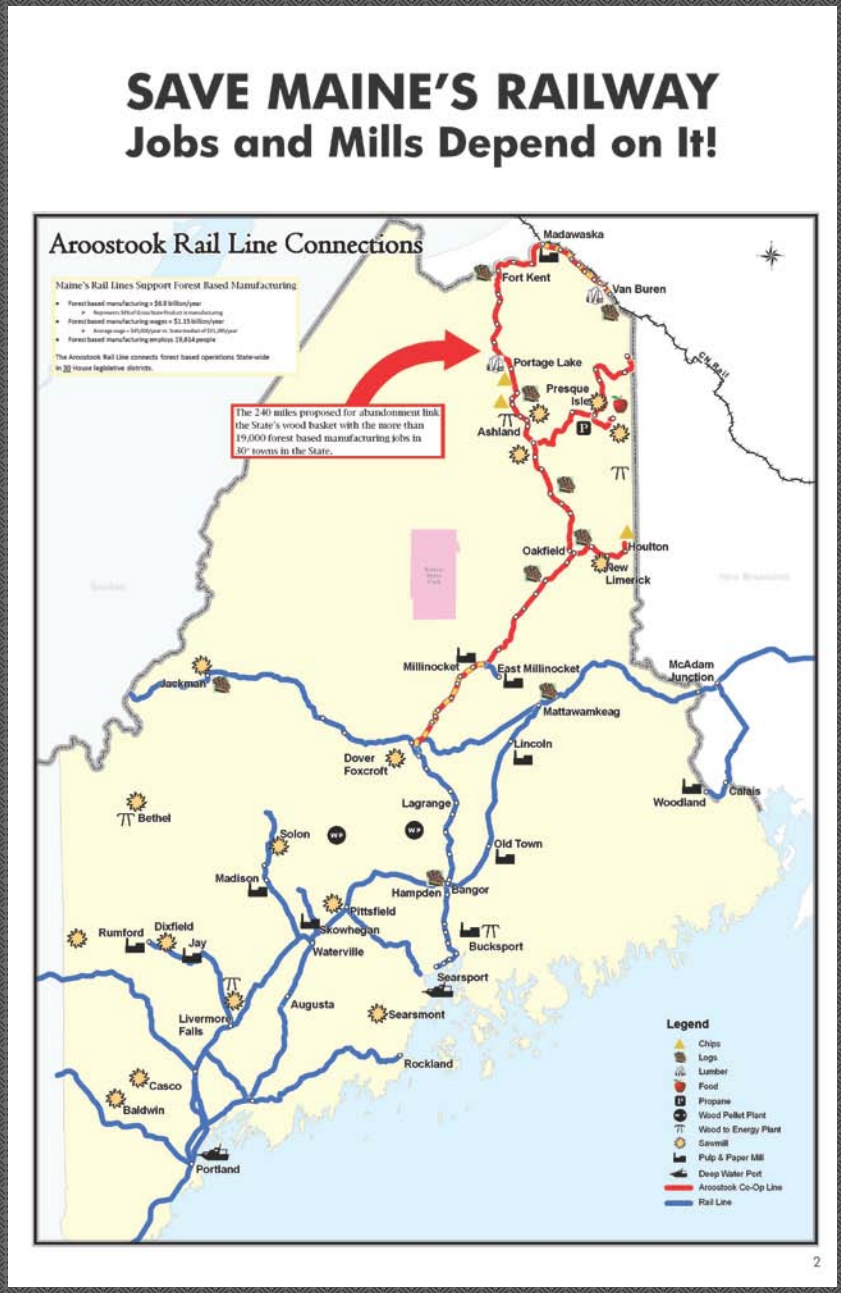
Rehabilitation of I-295 SB & NB:
Gardiner to Topsham



Full Closure of more than 18 miles of Interstate Highway Reduced Project Duration, Saved $$, and Ensured Safer Travel

Courtesy of MaineDOT

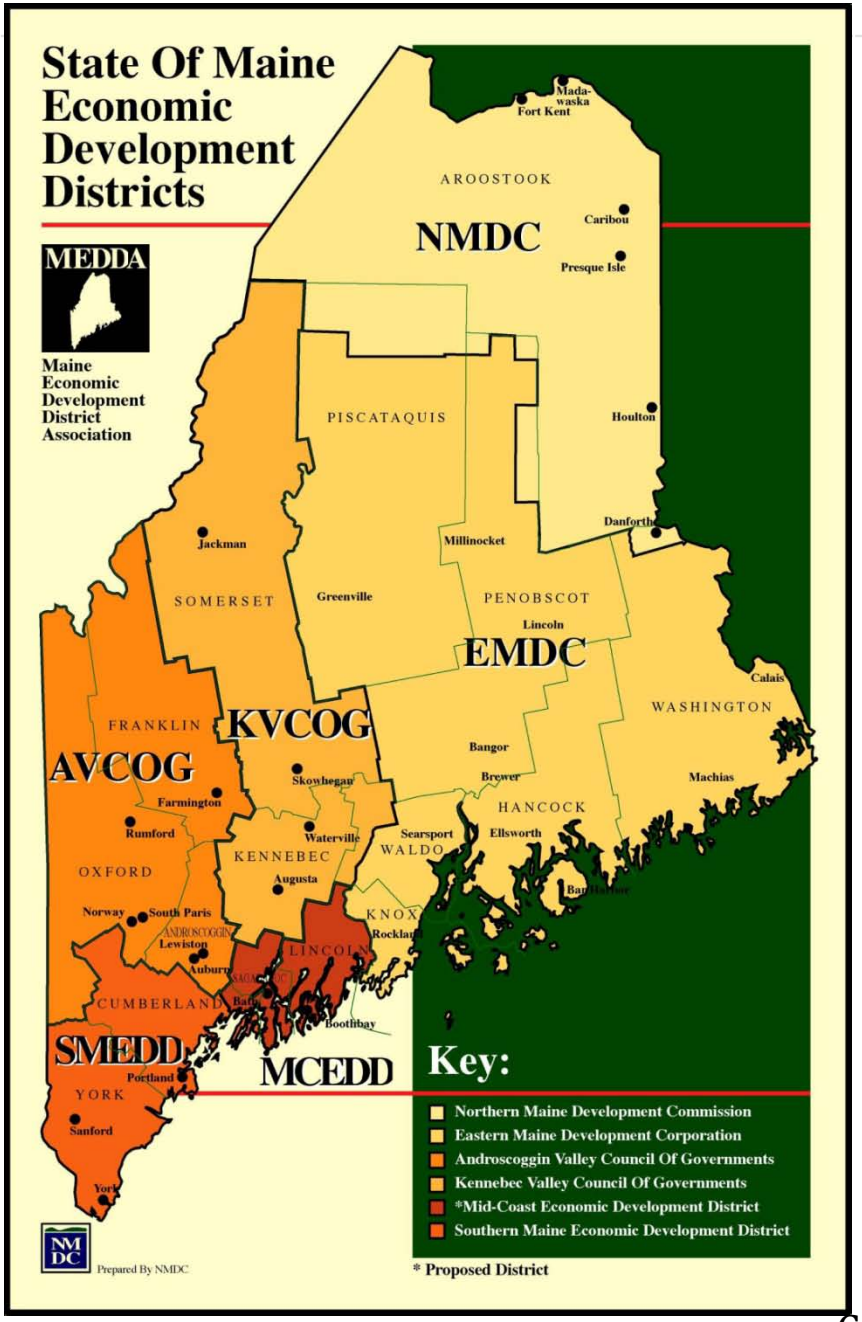
Impacts of Aroostook Rail Abandonment - 233 miles of track in northern Maine.



Courtesy of NMDC

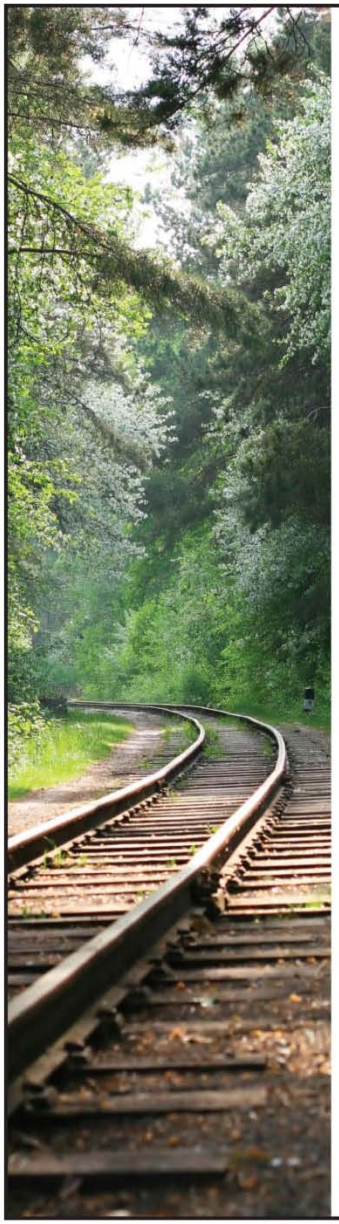
Maine's Economic Development Districts and Regional Planning Commissions

New Partnership with Maine DOT



Courtesy of NMDC

“Save the Rail” Campaign



SAVE MAINE’S RAILWAY
Jobs and Mills Depend on It!

For over 100 years the 151 miles of railway between Madawaska and Millinocket, and the spurs to Houlton and Presque Isle, has sustained jobs and manufacturing in Maine. It is a vital North-South transportation lifeline.

For business and for the environment, rail is the best way to move wood to mills and finished forest products to market. A number of other businesses also depend on rail. Without a solution more than **30,000 transport trucks** will be added to Maine roads. Jobs, mills, and future economic development will be in jeopardy.

What’s at risk ...

- **19,000 JOBS**
- **$1.15 BILLION/YEAR IN WAGES**
- **$6.9 BILLION/YEAR FOREST PRODUCTS INDUSTRY**
- **34% GROSS STATE PRODUCT IN MANUFACTURING**

COMMUNITIES THAT NEED THE RAIL LINE

Madawaska	Lincoln	Skowhegan
Fort Kent	Jackman	Waterville
Van Buren	Dover Foxcroft	Bucksport
Portage Lake	Woodland	Searsport
Presque Isle	Lagrange	Rumford
Ashland	Old Town	Dixfield
Oakfield	Bethel	Jay
Houlton	Solon	Livermore Falls
New Limerick	Madison	Rockland
Millinocket	Bangor	Casco
East Millinocket	Hampden	Baldwin
Mattawamkeag	Pittsfield	Portland

THE VOTE IS TODAY. ENCOURAGE YOUR LEGISLATOR TO SUPPORT THE BONDS. KEEP MAINE’S RAILWAY LINE WORKING FOR MAINERS!

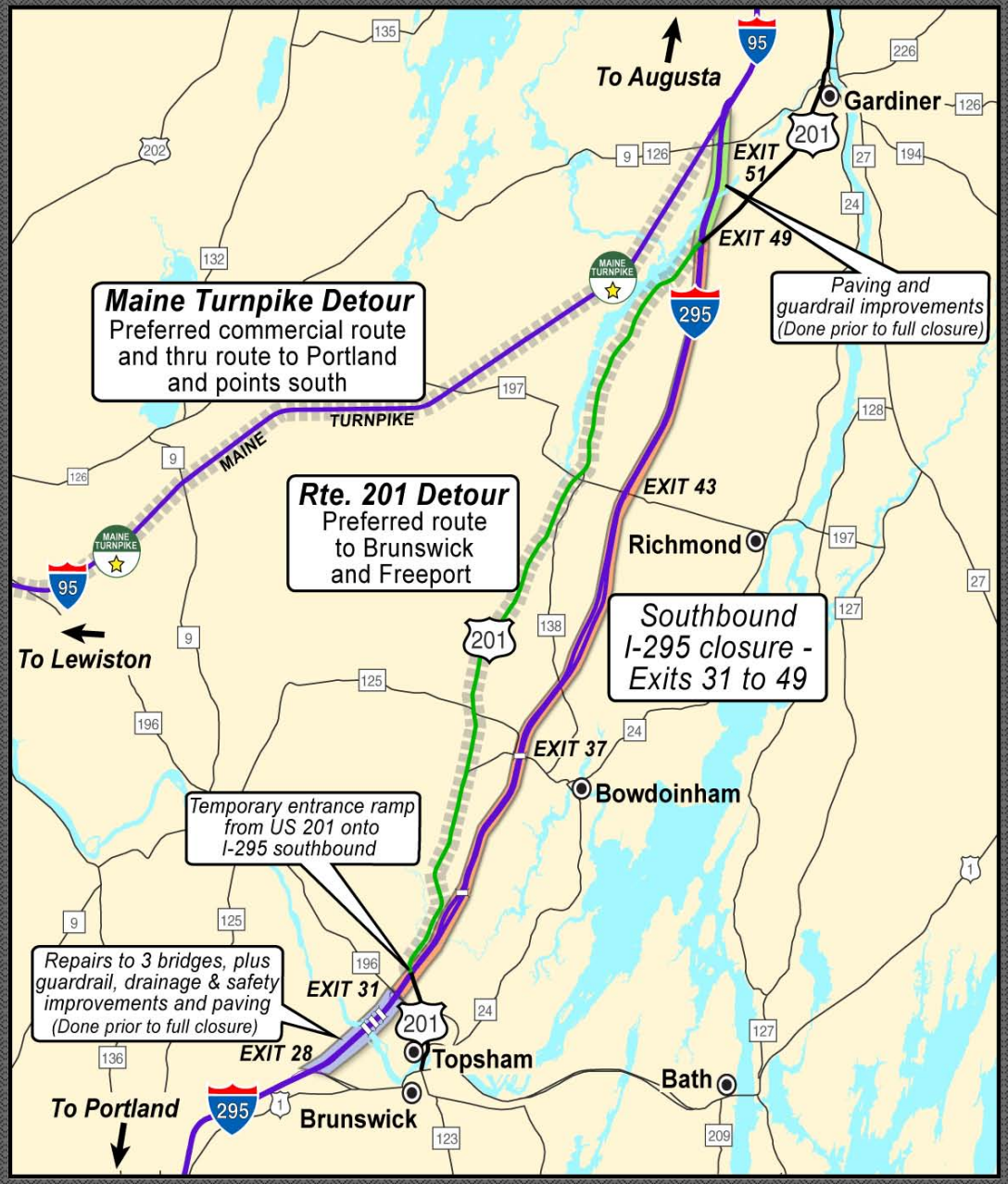
HUBER ENGINEERED WOODS · Aroostook Partnership for Progress · KATAHDIN CEDAR LOG HOMES · FraserPapers Fraser Timber Limited · LEADERS Encouraging Aroostook Development

OLDTOWN FUEL&FIBER · NMDC · IRVING IRVING WOODLANDS, LLC · ISLANDS · SADC ON THE GO · PORTAGE WOOD PRODUCTS, LLC · Domtar

Orion TIMBERLANDS, LLC · BORALEX · MWC Maine Woods Company · TWIN RIVERS PAPER COMPANY · MOOSE RIVER LUMBER · sappi

Published in the Bangor Daily News on April 7, 2010

I-295 Reconstruction



Courtesy of MaineDOT

Results: Public Perception

Hailed by Central Maine's *Kennebec Journal* as "an example of how to do things right" and praise from key community members.

KENNEBEC JOURNAL

Intermodal Facility, Auburn, Maine

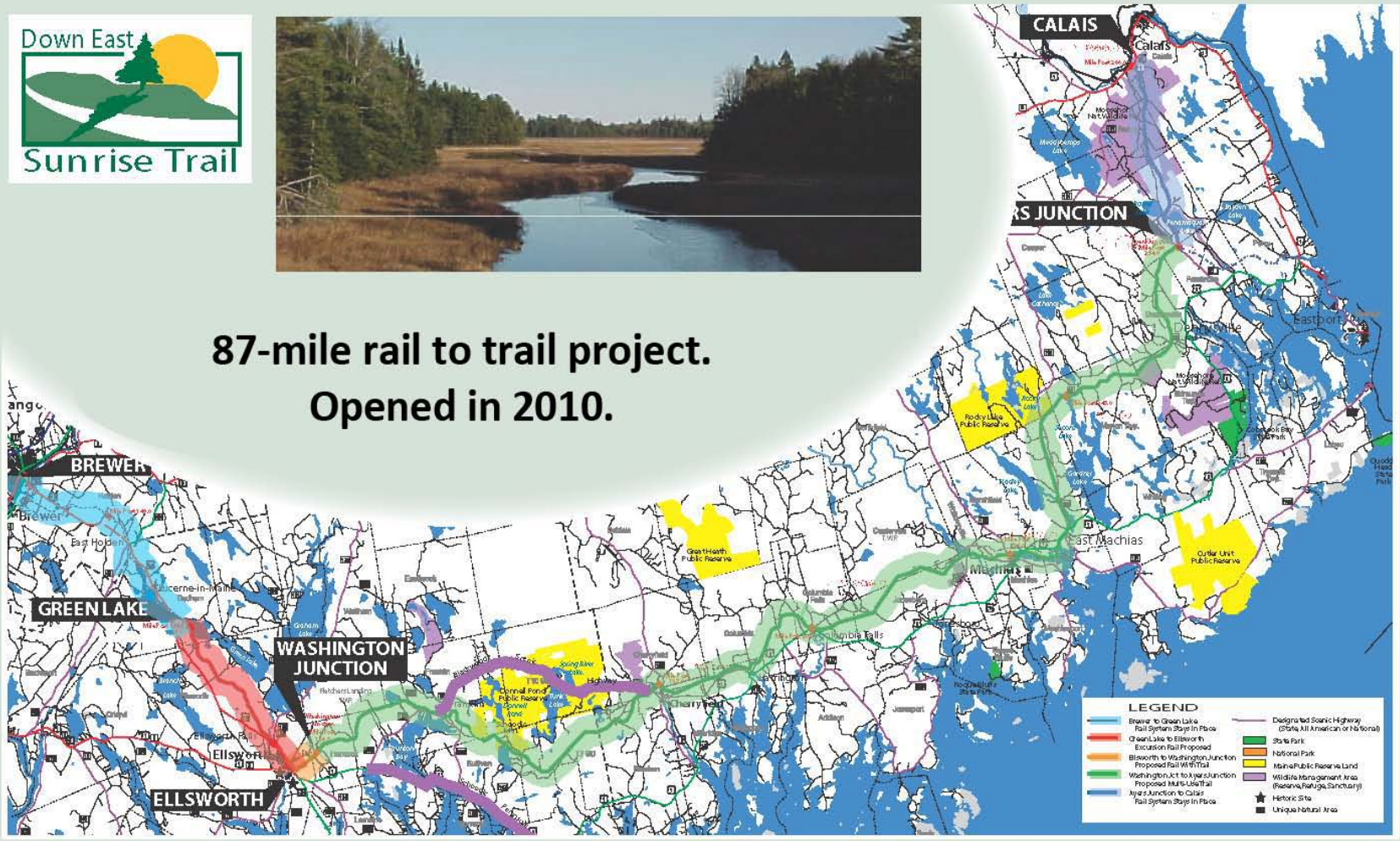
Courtesy of MaineDOT

Maine's Railroad Network

Source: MaineDOT

Down East Sunrise Trail

87-mile rail to trail project.
Opened in 2010.



Rail Corridor Preservation

Before…

DOWN EAST TRAIL: A BRIEF HISTORY:

- 1987, The Corridor acquired by MaineDOT after abandonment
- Many studies have been completed: Insufficient business potential to support rail service
- On two occasions, RFP's for operation of the line were announced
- No viable operator was found because of the significant investment required to allow 25 MPH track speeds, and the lack of traffic and revenue to sustain the operation.

Slide courtesy of MaineDOT

- All the Washington and Hancock County Legislators signed
- Included as one of the key elements removing all track and rail material from Ellsworth to Ayers Junction, and converting the corridor to an interim multi-use trail.
- Also included the development of a management plan

Slide courtesy of MaineDOT

Completed Long-Distance Multi-Use Trail in Down East Maine

The Aroostook Railroad

NMDC hosts meeting between MDOT, MM&A & Shippers. Level of interest is re-assessed.

Courtesy of NMDC

- UMaine AEWC Composites Center
  - 87,000 ft^2 facility
  - Researching Hybrid Composite Systems since 1996
  - Nearly 10 years development of Bridge-in-a-Backpack

Secretary of** Transportation **Ray LaHood Speaks about Bridge-in-a-Backpack at UMaine Press Event

Courtesy of AIT

Composite Arch "Bridge-in-a-Backpack" System

"Hybrid bridge system combining benefits of high-performance composites with cast-in-place concrete,"

Image Credit – NY Times/University of Maine

Courtesy of AIT

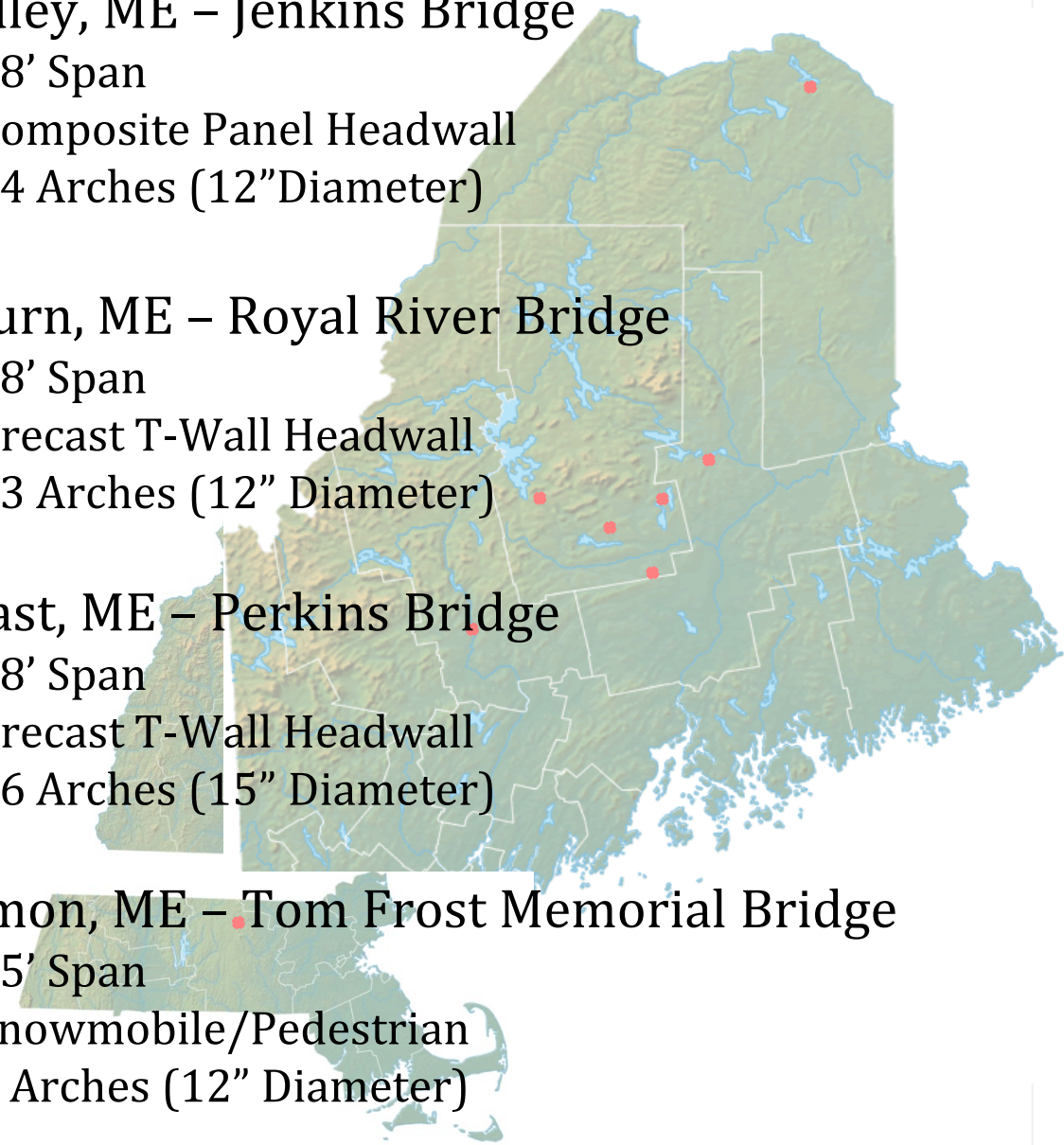
Third Generation Bridges

- Bradley, ME – Jenkins Bridge
  - 28’ Span
  - Composite Panel Headwall
  - 14 Arches (12”Diameter)

- Auburn, ME – Royal River Bridge
  - 38’ Span
  - Precast T-Wall Headwall
  - 13 Arches (12” Diameter)

- Belfast, ME – Perkins Bridge
  - 48’ Span
  - Precast T-Wall Headwall
  - 16 Arches (15” Diameter)

- Hermon, ME – Tom Frost Memorial Bridge
  - 45’ Span
  - Snowmobile/Pedestrian
  - 3 Arches (12” Diameter)



Courtesy of AIT

Longest composite bridge in the world: Boothbay Harbor, Maine HC Beam

Courtesy of HC Beam

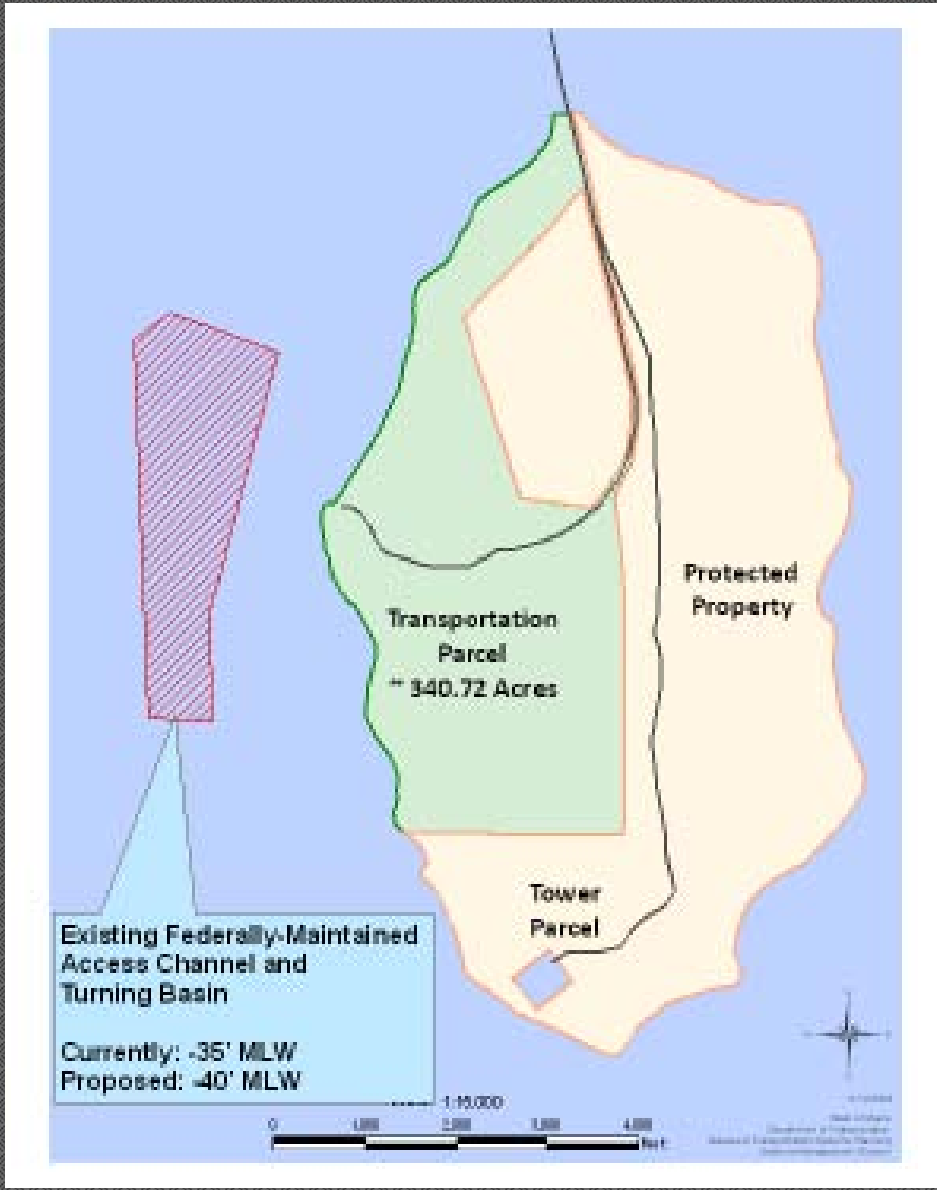
Port of Searsport

Courtesy of MaineDOT

Sears Island

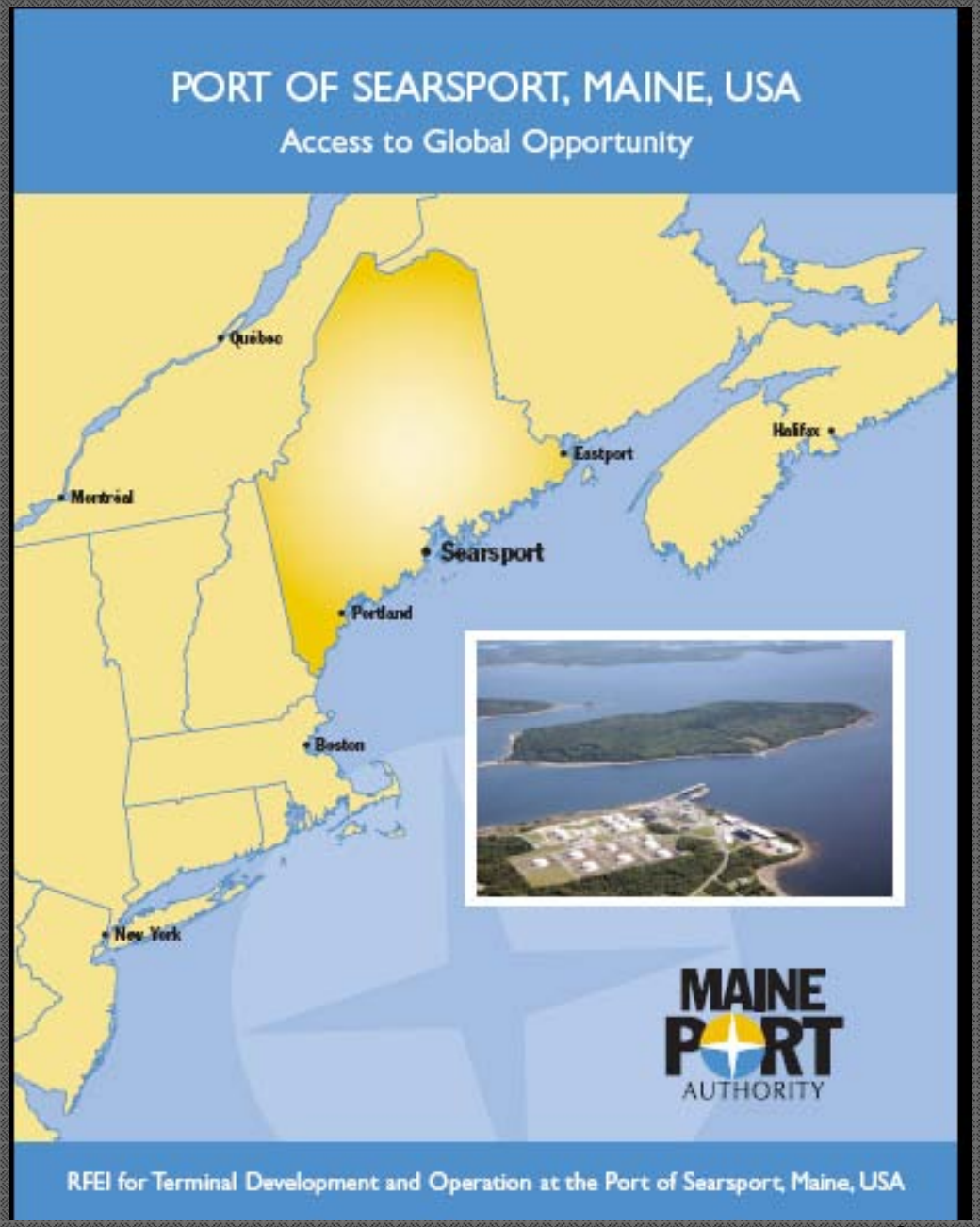
Courtesy of MaineDOT

Compromise from "Consensus greement"



Courtesy of MaineDOT

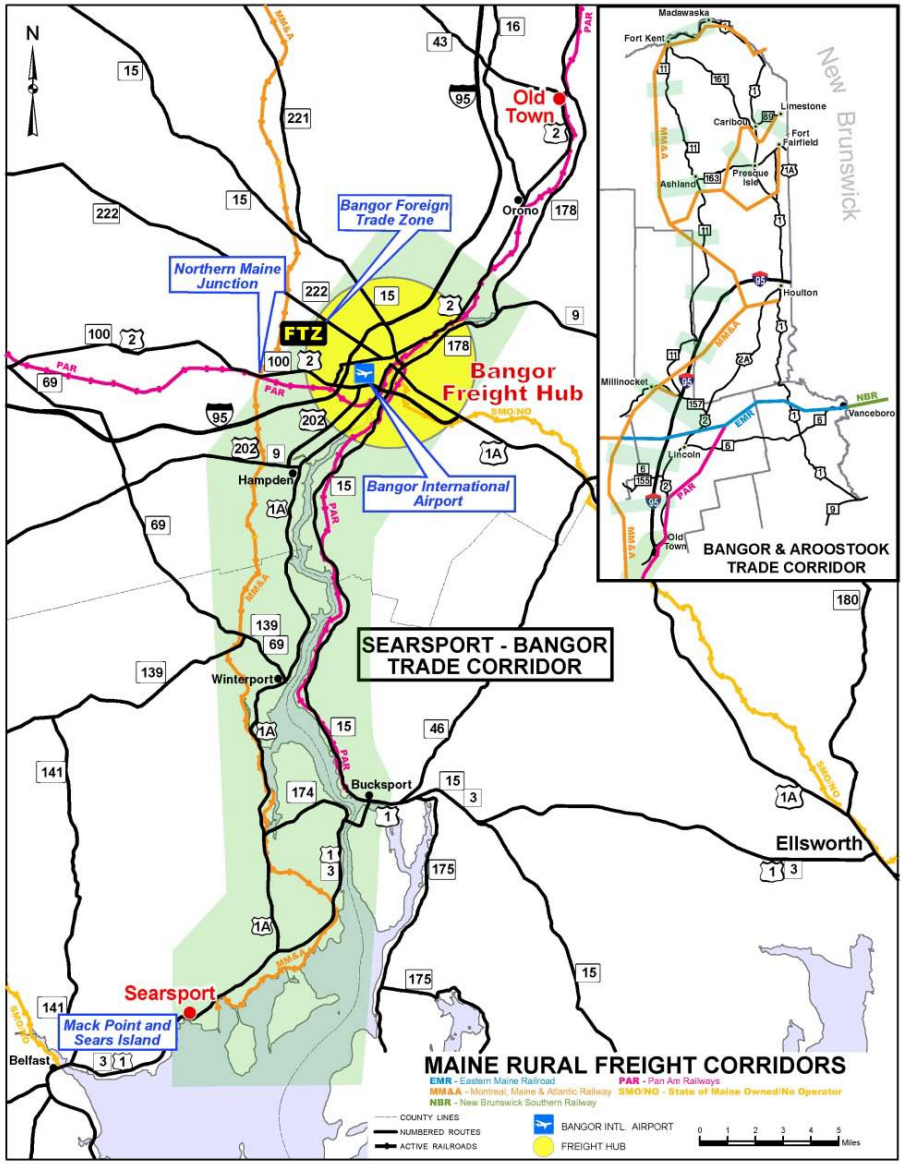
Marketing Searsport to the World



Courtesy of MaineDOT

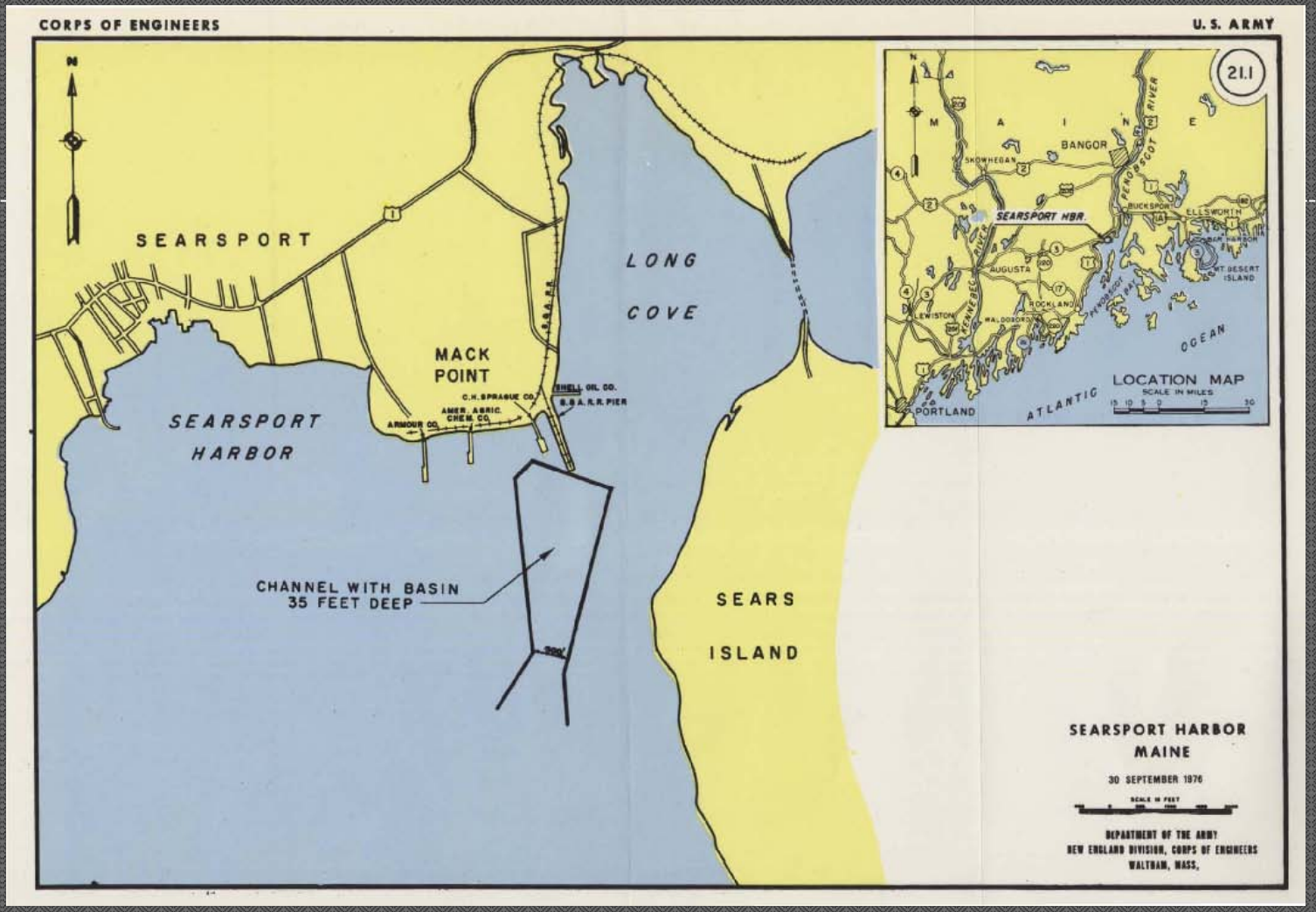
Bangor-to-Searsport Freight Corridor

- Searsport-to-Bangor rail connections; Sears Island
- Inland port
- Port-to-rail
- Port-to-truck



Courtesy of MaineDOT

Searsport Channel-Deepening Project



Courtesy of MaineDOT

CAUTION
THIS SIGN HAS
SHARP EDGES
DO NOT TOUCH THE EDGES OF THIS SIGN
ALSO, THE BRIDGE IS OUT AHEAD

DAVID COLE
CONSULTING