



Bow-Concord Interstate 93 Transportation Planning Study

Presentation to:
Greater Concord Chamber of
Commerce and Concord 2020

June 21, 2006



Transportation in New Hampshire

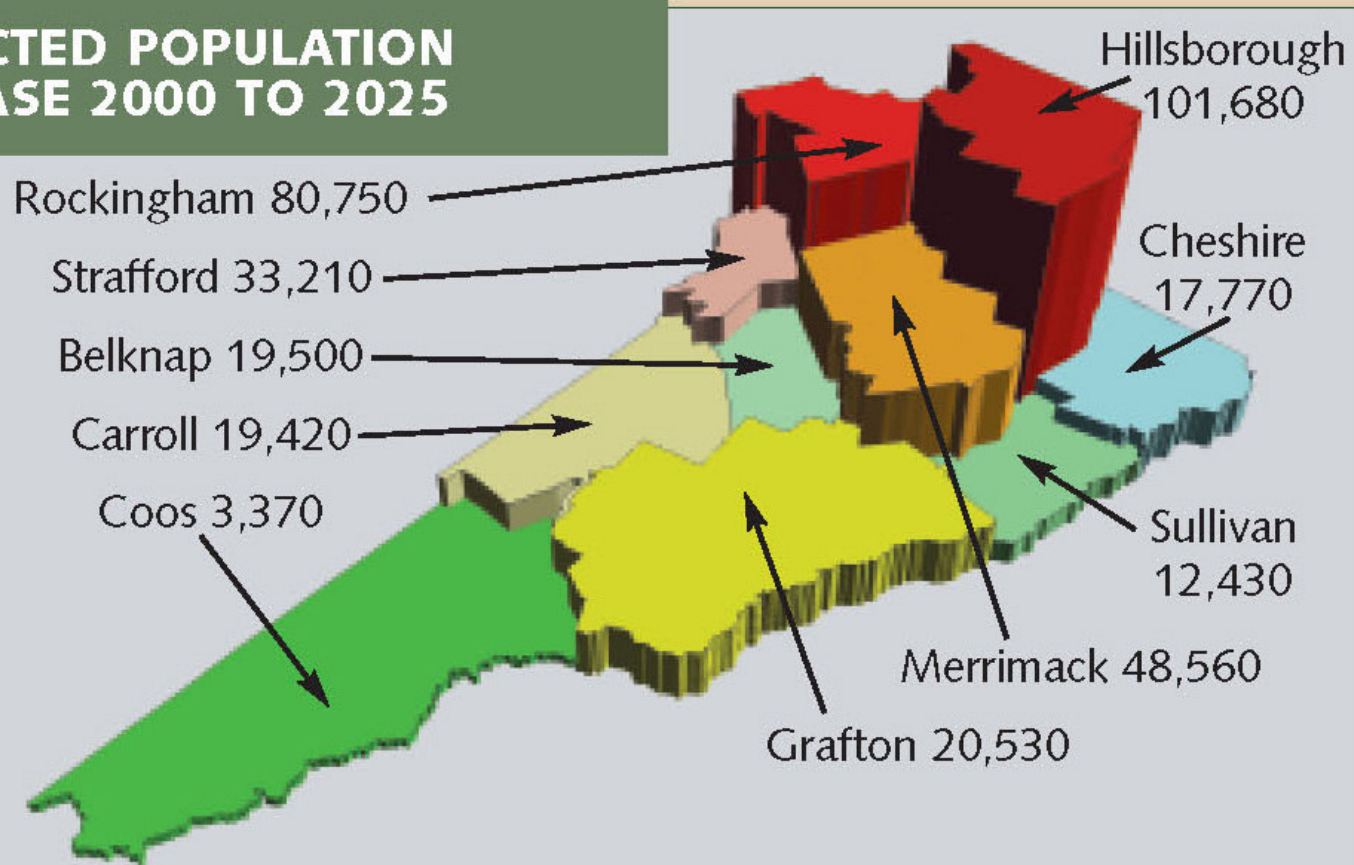
- NH Transportation Business Plan
- NHDOT Long Range Plan
- Community Technical Assistance Program (CTAP)
- Context Sensitive Solutions (CSS)



A Changing New Hampshire

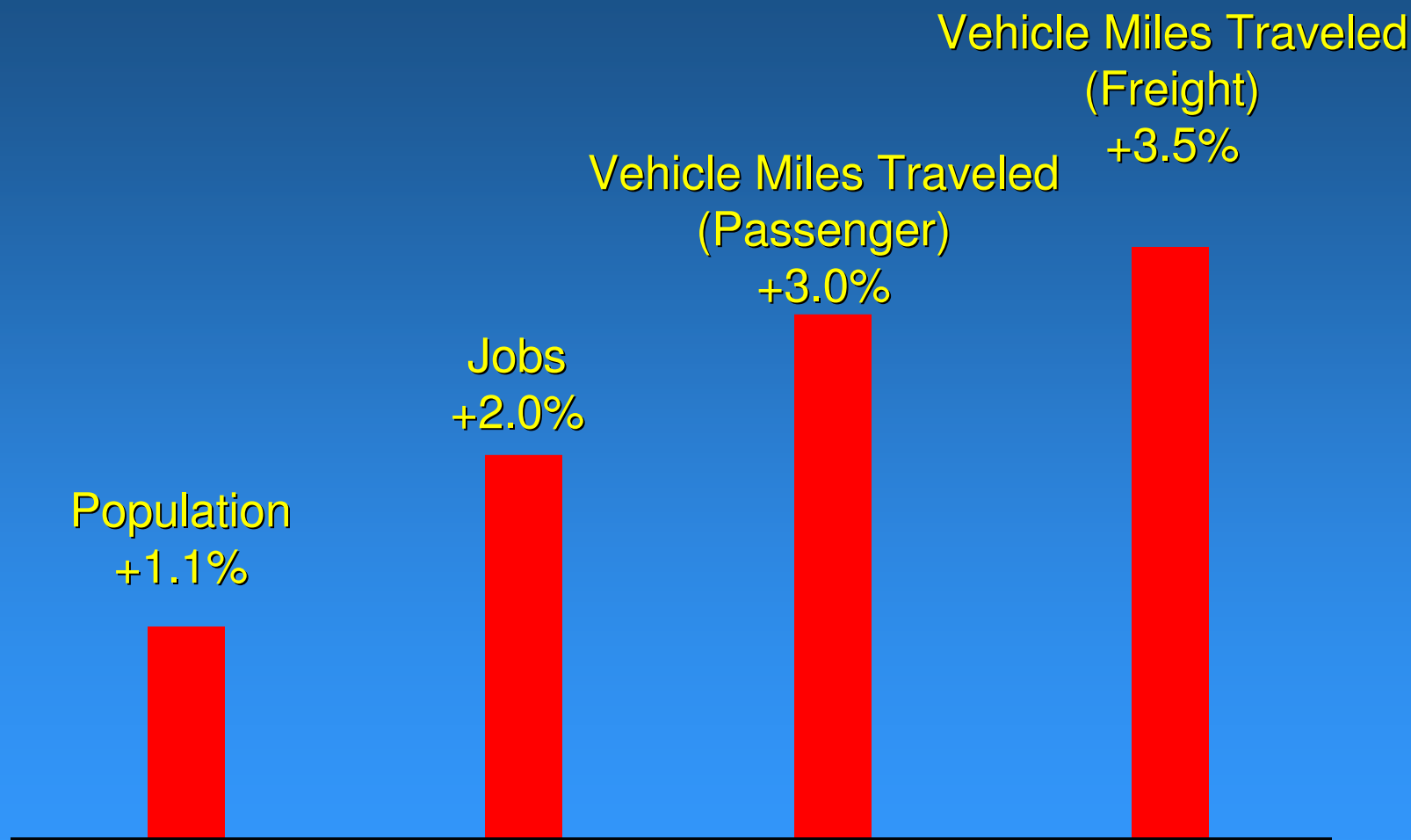
WHERE IS NH GROWING?

PROJECTED POPULATION INCREASE 2000 TO 2025



Source: Society for the Protection of NH Forests, 2005.

Demographic and Travel Trends



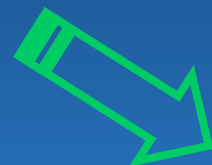
Central NH Population

	<u>2000</u>	<u>2030 Forecast</u>	
Allenstown	4,854	6,100	
Boscawen	3,684	5,100	
Bow	7,168	11,300	
Canterbury	1,991	3,400	
Chichester	2,259	3,600	
Concord	40,785	53,500	
Dunbarton	2,252	3,700	<u>2030</u>
Epsom	4,051	6,700	Concord – 45%
Hopkinton	5,412	7,000	All Others – 55%
Loudon	4,510	7,400	
Pembroke	6,917	9,000	
Webster	1,591	3,100	
Total	<u>85,474</u>	<u>120,000</u>	(40% Increase)

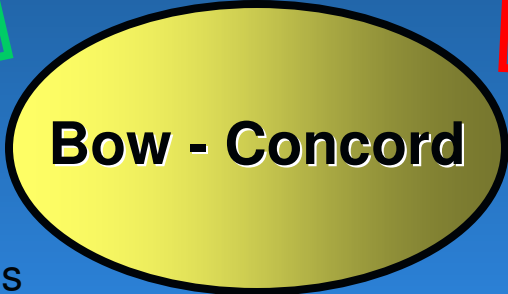
	<u>2000</u>	<u>2030 Forecast</u>	
Allenstown	1,040	1,872	<p>Central NH Employment</p> <p><u>2030</u> Concord – 74% All Others – 26%</p>
Boscawen	1,760	3,092	
Bow	4,741	10,072	
Canterbury	336	606	
Chichester	729	1,172	
Concord	46,423	87,518	
Dunbarton	244	688	
Epsom	1,387	2,273	
Hopkinton	2,206	3,528	
Loudon	1,826	2,716	
Pembroke	2,600	3,932	
Webster	134	138	
Total	63,426	117,616	

Bow-Concord Planning Group

Environment



- Environmental Protection Agency
- Army Corp. of Engineers
- US Fish & Wildlife
- NH Dept. of Environmental Services
- NH State Historic Preservation Office
- NH Fish & Game
- Conservation Law Foundation
- Society for the Protection of NH Forests
- Jordan Institute
- NH Celebrates Wellness



Bow - Concord

Community



- Town of Bow
- City of Concord
- Town of Pembroke
- Concord 2020
- Chamber of Commerce
- River Connection



Transportation

- FHWA
- NHDOT
- Central NH Regional Planning
- NHDRED – Travel & Tourism
- NH Office of Energy & Planning
- Concord Area Transit
- Concord Trailways
- Guilford Rail
- NE Southern Railroad

Context Sensitive Solutions Planning Steps

Problem
Statement

Goal
Statement

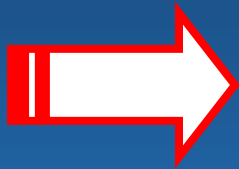
Screening
Criteria

Brainstorm
Alternatives

Screen
Alternatives

Determine
Range of
Reasonable
Alternatives

NHDOT Project Development Process for Bow-Concord



Part A – Planning (2003 - 2006)

- Purpose and Need for Project
- Range of Reasonable Alternatives
- Public Involvement

Part B – Scoping (2007-2008)

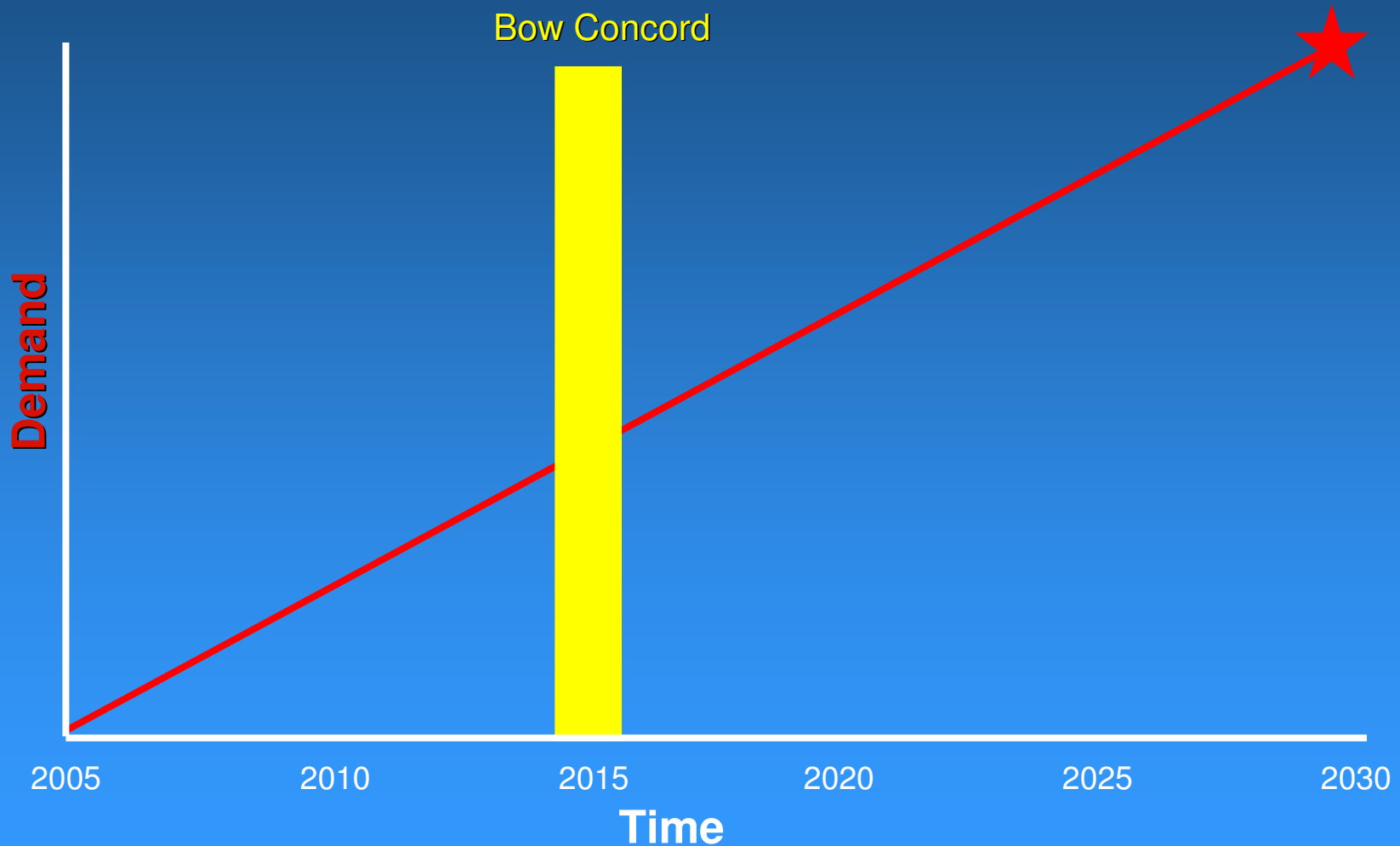
- Select Preferred Alternative
- Environmental Documentation
- Public Hearing

Part C – Design (2009-2012)

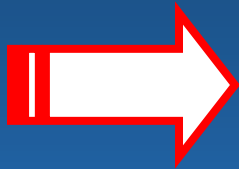
- Detailed Design
- Purchase Right of Way
- Secure Permits

Begin Construction (2013)

Traditional Approach



NHDOT Project Development Process for Bow-Concord



Part A – Planning (2003 - 2006)

- Purpose and Need for Project
- Range of Reasonable Alternatives
- Public Involvement

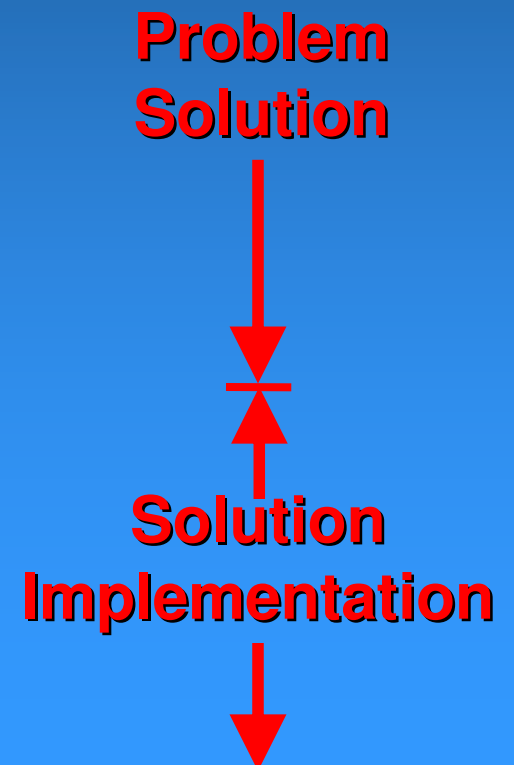
Part B – Scoping (2007-2008)

- Select Preferred Alternative
- Environmental Documentation
- Public Hearing

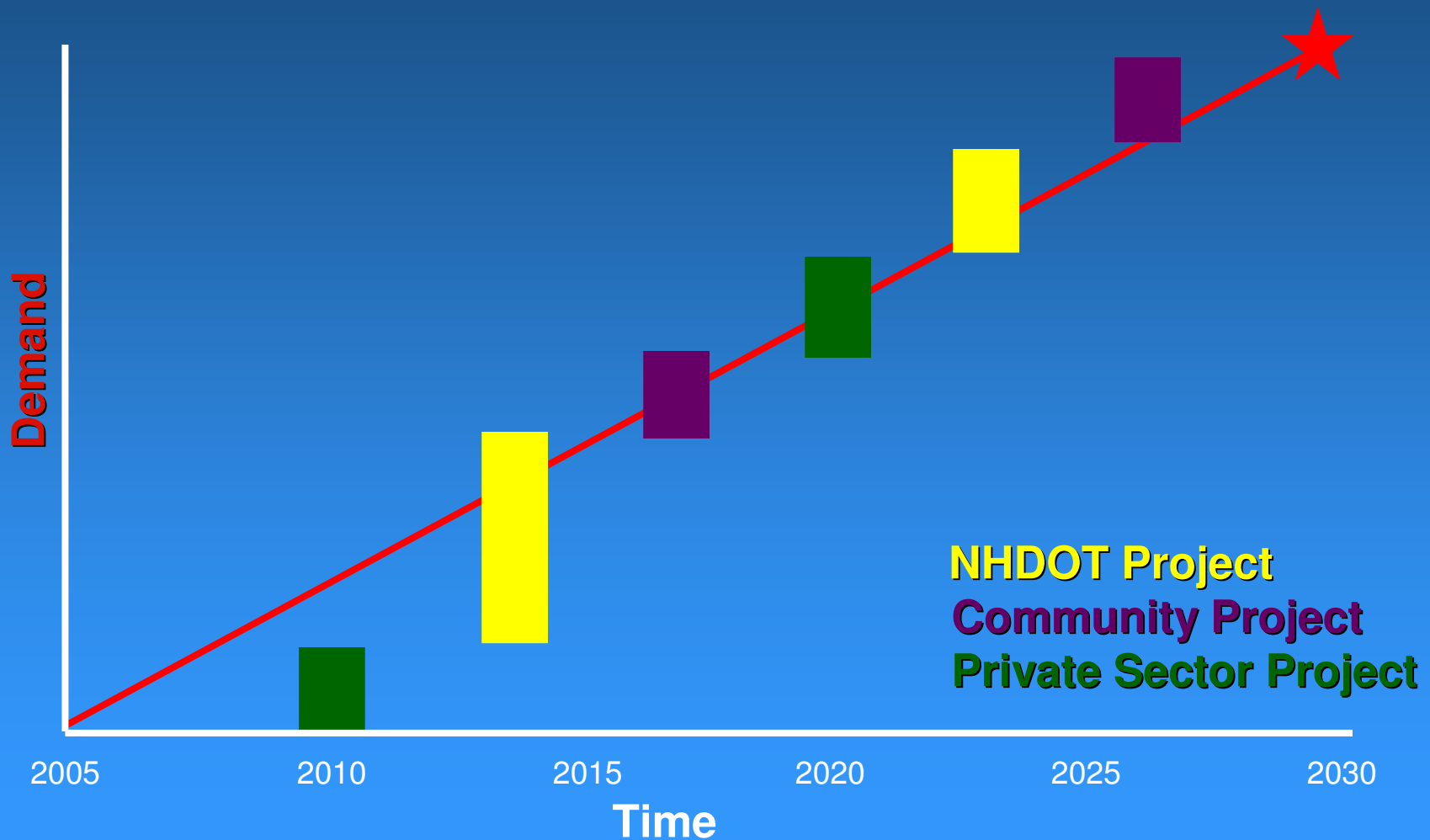
Part C – Design (2009-2012)

- Detailed Design
- Purchase Right of Way
- Secure Permits

Begin Construction (2013)



New Approach



Known Alternatives

Alternatives

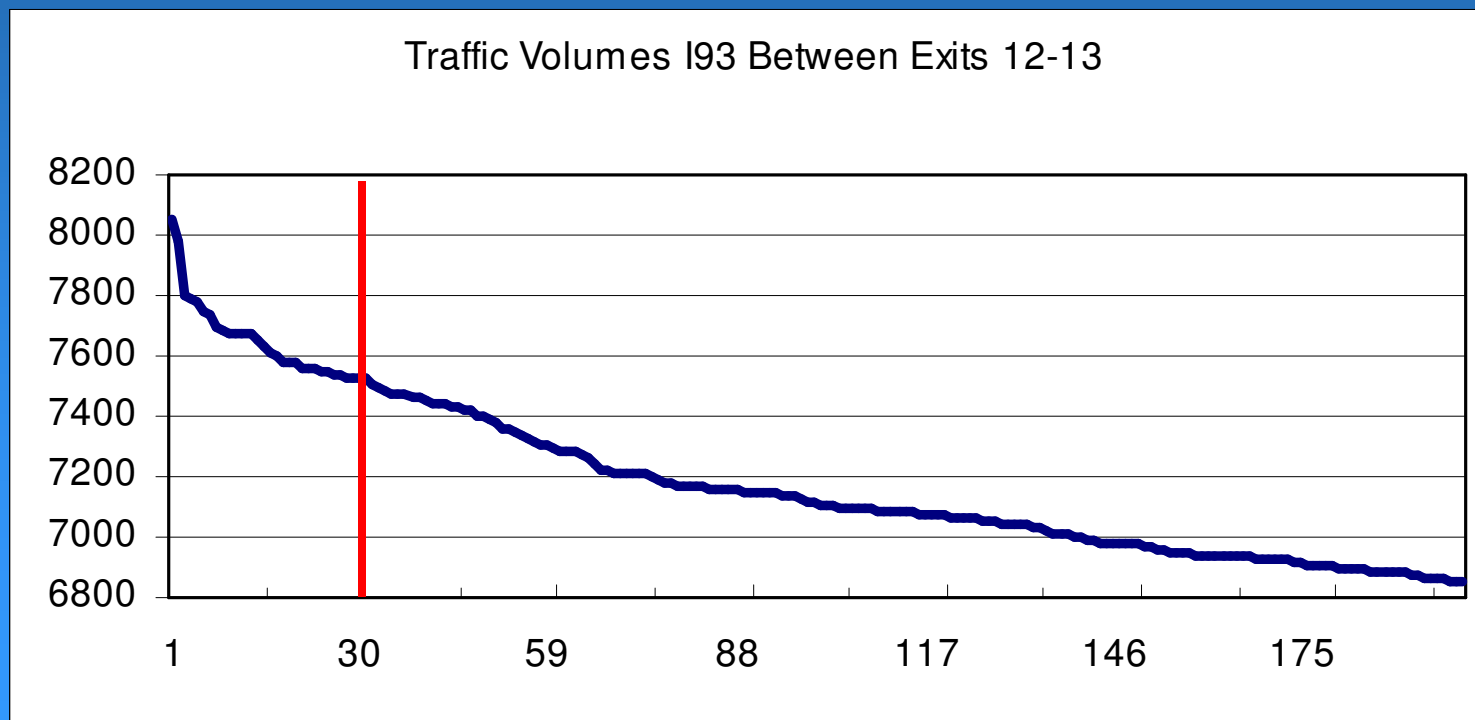
- No Build
- Transportation Demand Management
- Interstate 93
 - Four Lanes
 - Six Lanes
 - Eight Lanes
 - Shift to East Side of River
 - Shift West
 - Reversible Lanes
- Opportunity Corridor Concept
- Route 106 Connectors
- Passenger Rail Service
- 1992 Feasibility Study
- Separate Local/Thru Traffic
- Western Beltway

Components

- I-93
- New Exit 16-1/2 on I-93
(at Sewalls Falls Rd)
- New Exit 11-1/2 on I-93
- New Exit 2-1/2 on I-393
(at Portsmouth St)
- Exit 14 Grade Reversal
- Langley Parkway (NW Bypass)
- Storrs & Commercial Streets Expansion
- Expanded Bus Service
- Access to Merrimack River
- Bicycle and Pedestrian Access
- Exit 16 to Route 3 Connector
- Reduce Exits
- More Rail Freight

Forecast Considerations

- Scenarios only corridor-level
- 2030 Land Use same for all scenarios
- Forecasting of the 30th highest hour



Changes between 2000 to 2030 No Build

Travel Time Change

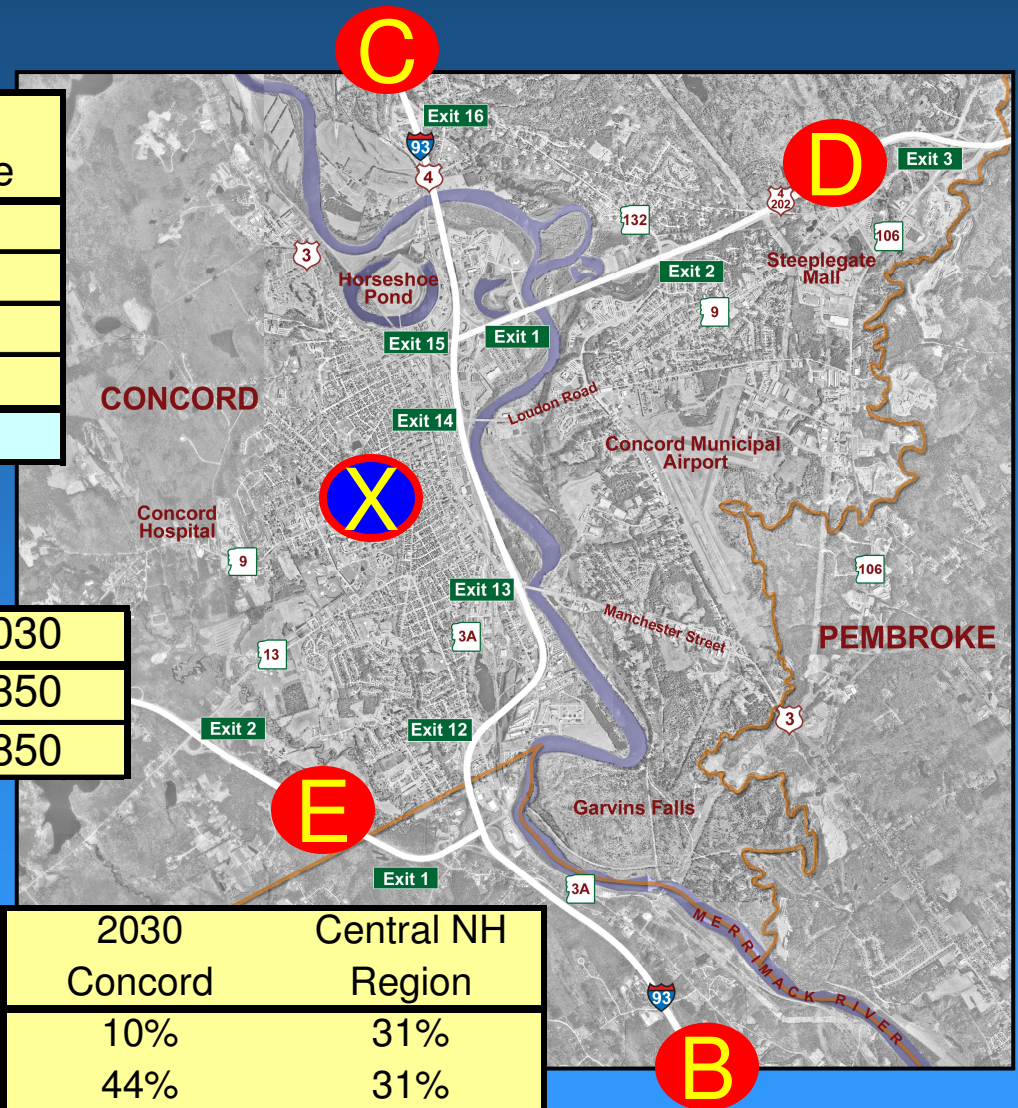
From Statehouse	2000	2030	Increase
to B	15	25	67%
to C	10	16	64%
to D	20	28	41%
to E	20	33	65%
I-93 (B-C)	15	23	53%

Route Choice Changes

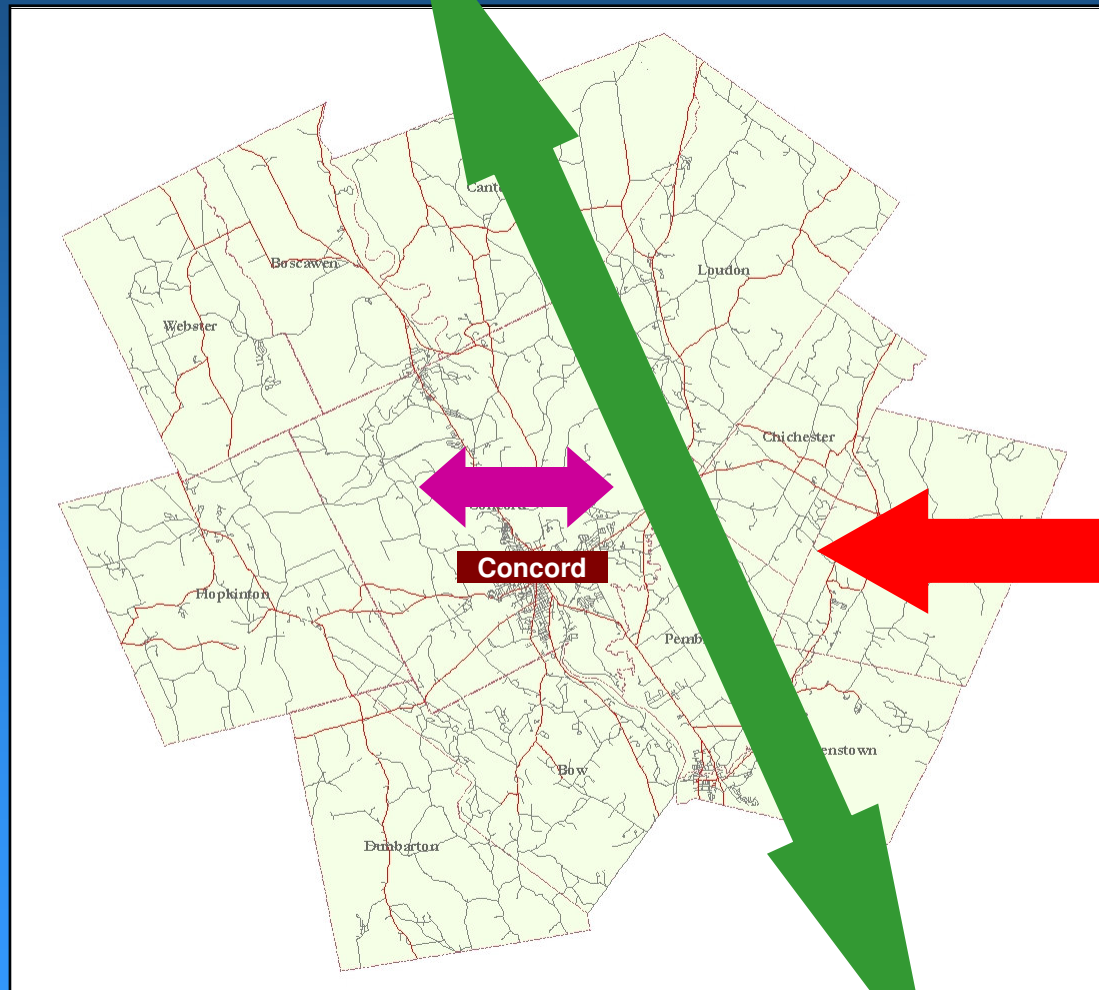
Roads	Increase	2000	2030
I-93	28%	7300	9350
Local	40%	2750	3850

I-93 Trip Composition

Type	2000 Concord	2000 Central NH Region	2030 Concord	2030 Central NH Region
Internal	13%	34%	10%	31%
I-E / E-I	39%	32%	44%	31%
External	48%	34%	46%	37%



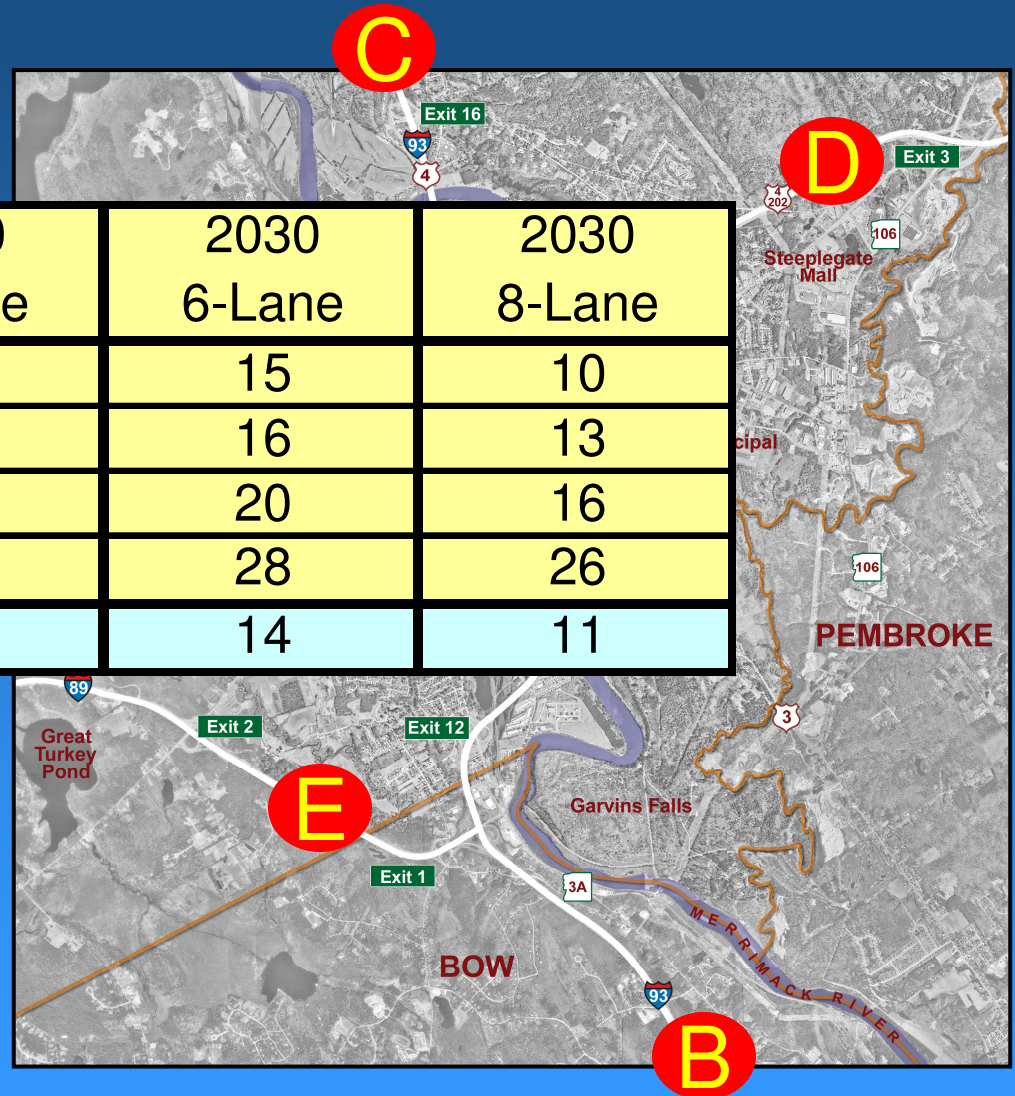
Trip Composition



2030 I-93 Investment Forecast

I-93 Travel Time Change

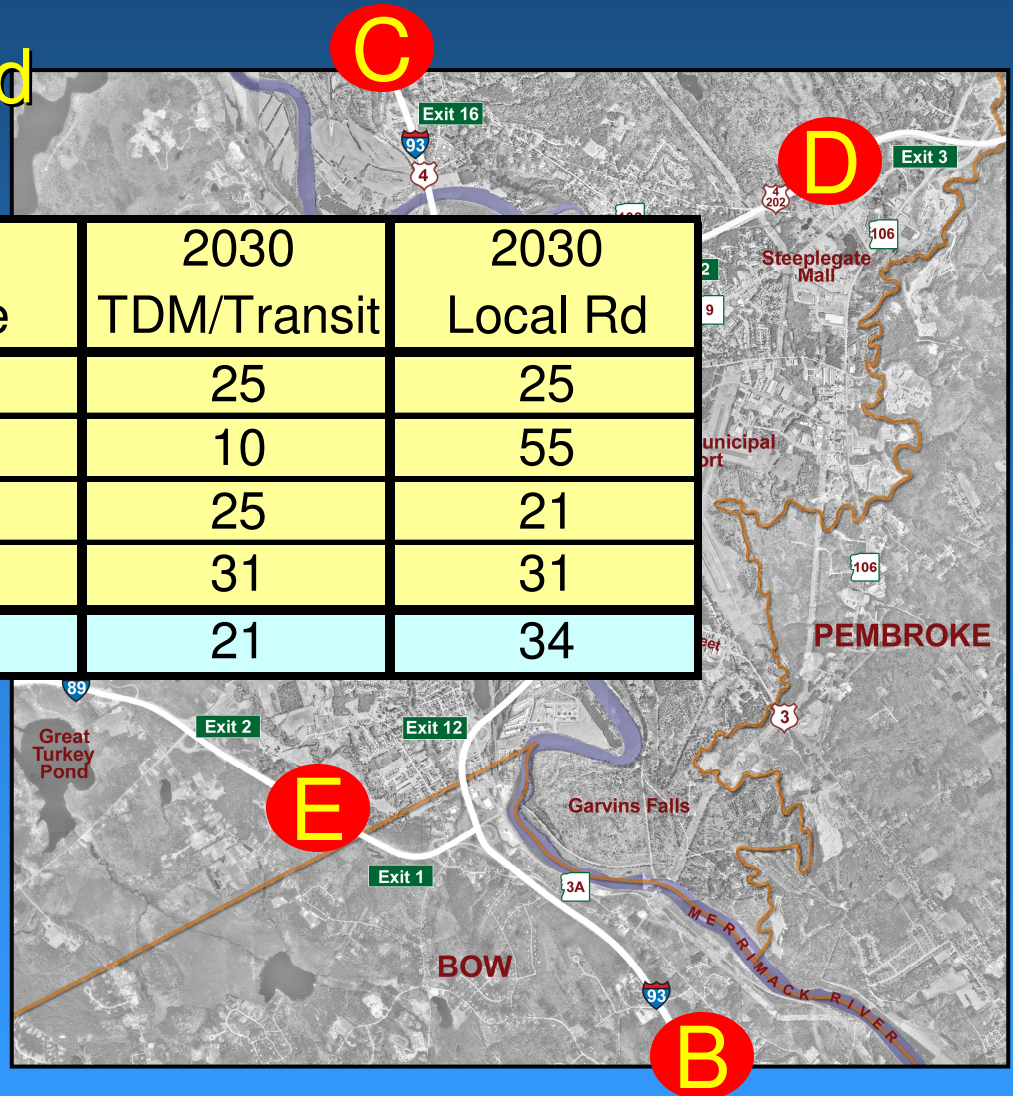
From Statehouse	2000 4-Lane	2030 4-Lane	2030 6-Lane	2030 8-Lane
to B	15	25	15	10
to C	10	16	16	13
to D	20	28	20	16
to E	20	33	28	26
I-93 (B-C)	15	23	14	11



2030 TDM/Transit & Local Road Forecast

TDM/Transit & Local Road Travel Time Change

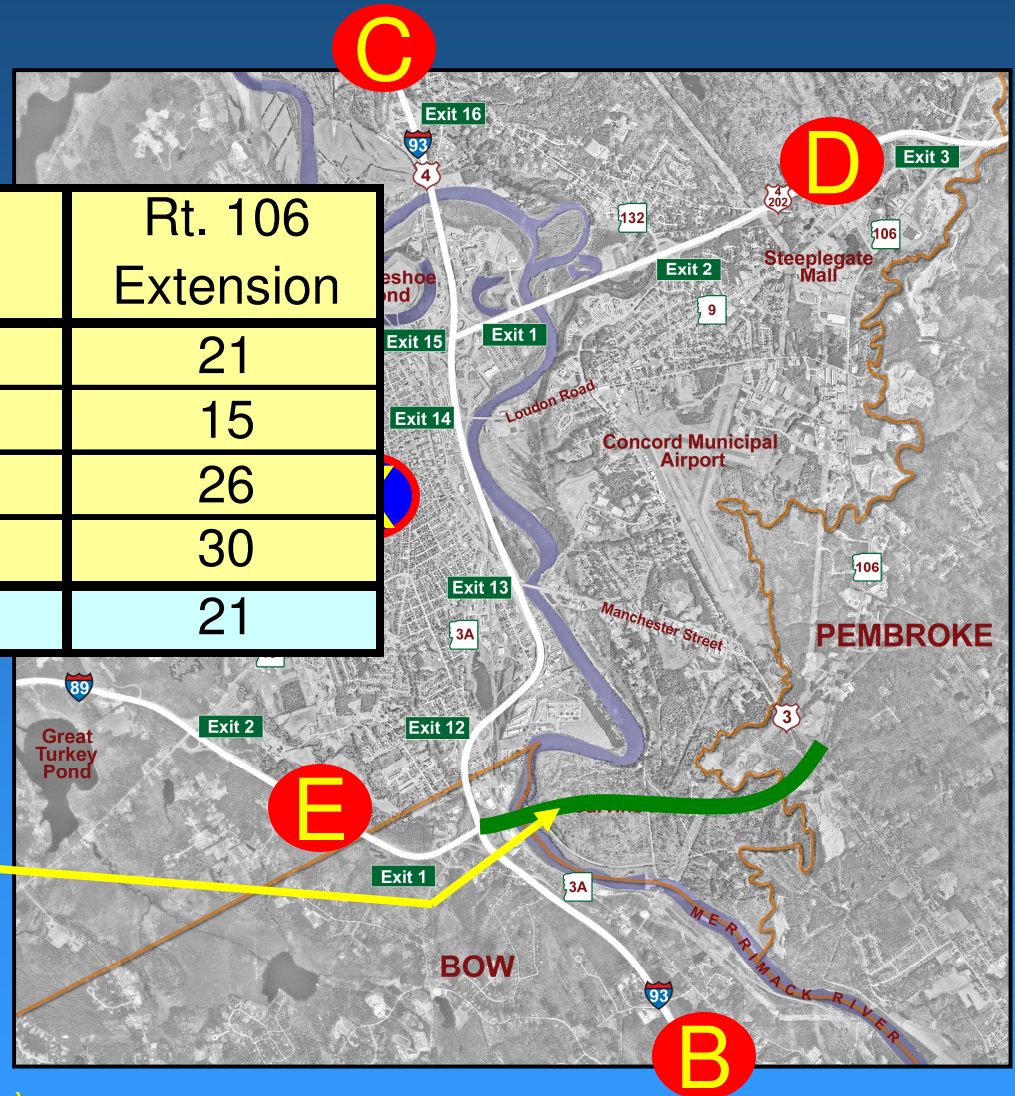
From Statehouse	2000 4-Lane	2030 4-Lane	2030 TDM/Transit	2030 Local Rd
to B	15	25	25	25
to C	10	16	10	55
to D	20	28	25	21
to E	20	33	31	31
I-93 (B-C)	15	23	21	34



2030 Route 106 Connector Forecast

Travel Time Changes

From Statehouse	2000 4-Lane	2030 4-Lane	Rt. 106 Extension
to B	15	25	21
to C	10	16	15
to D	20	28	26
to E	20	33	30
I-93 (B-C)	15	23	21



Route 106 Connector carries 2050 vehicle trips

- -30% on Manchester Street
- -7.5% on I-93 North (-650 Vehicles)
- No change on I-93 South
- +30% on NH 106 North (+650 Vehicles)



Opportunity Corridor Concept

- Six Lanes on I-93
- Westerly Shift of I-93
- Lower I-93 b/w Exits 13 & 15
- Reconfigure Exits 14 & 15
- Maintain Rail Corridor
- Extend Storrs Street
- Local connection over I-93
- Multi-modal center
- Enhanced pedestrian & bicycle connections
- Enhance river access



Questions?
Comments?
Other Ideas?

WWW.
i93bowconcord.com