

Central York County Connections Study

Meetings of November 30th, 2010

Agenda

- Welcome and Introductions
- Where we are in the Study
- Purpose and Need Statement review
- Highlights of Baseline Conditions
- Potential Measures of Effectiveness (MOEs)
- Next Steps/Next Meetings

Study Work Flow

- Study Initiation
Sept. 2010 – Dec. 2011
- Initial Development and Evaluation of Concepts
Nov. 2010 – April 2011
- Detailed Screening and Evaluation of Strategies
March 2011 – Aug. 2011
- Study Finalization
Aug. 2011 – Jan. 2012

Study Work Flow

- Study Initiation
 - Mobilize team and administer the study
 - Collect and assess data and information
 - Build models and tools
 - Develop Purpose and Need statement
 - Initiate public outreach

Study Work Flow

- Initial Development and Evaluation of Concepts
 - Develop evaluation criteria and MOEs
 - Define range of concepts for consideration
 - Work with committees to develop and refine
 - Evaluate concepts (key MOEs)
 - Recommend and select concepts for further refinement and evaluation

Purpose and Need Statement



Purpose and Need Statement: Round 1

- Plan for regional needs/support visual/cultural character
- Fix what we have
- Promote economic growth
- Address traffic safety issues
- Development of state/local networks - address local concerns
- Move goods/services/people efficiently
- Provide relief for Rte. 1 through-traffic
- Destination-ease
- Promote increased development & trucking on Rte. 202
- Include discussion of funding feasibility

Purpose and Need Statement: Round 2

- Review multi-modal options to reduce traffic
- No negative impact on municipal budgets
- Fix intersections
- Do not sacrifice visual/cultural characteristics
- Address vehicle/bicycle/pedestrian safety issues
- Correlate buildout potential with access management
- Respect environmental systems/water supply/land use
- Coordinate with other planning processes
- Assure connectivity of Rtes. 109, 111, 95 with Rtes. 16 and 125 corridor
- Increase proportion of transit funding in region

Purpose and Need Statement

- Emphasize need for multi-modal service
- Need to talk about “interacting” with local Comp Plans
- Add connection to land use in Purpose Statement
- Improve safety for *all* modes
- Air transportation: connections to airport important?
- Add Rail as part of multi-modal
- Identify tourism promotion as separate from economic development
- Enhance connections between modes
- Question regarding long-term effect on municipal budgets

Purpose and Need Statement: Discussion

Baseline Conditions: Where Are We Today?

- Economic context
- Development trends
- Planning, zoning and access management
- Environmental and cultural resources
- Transportation

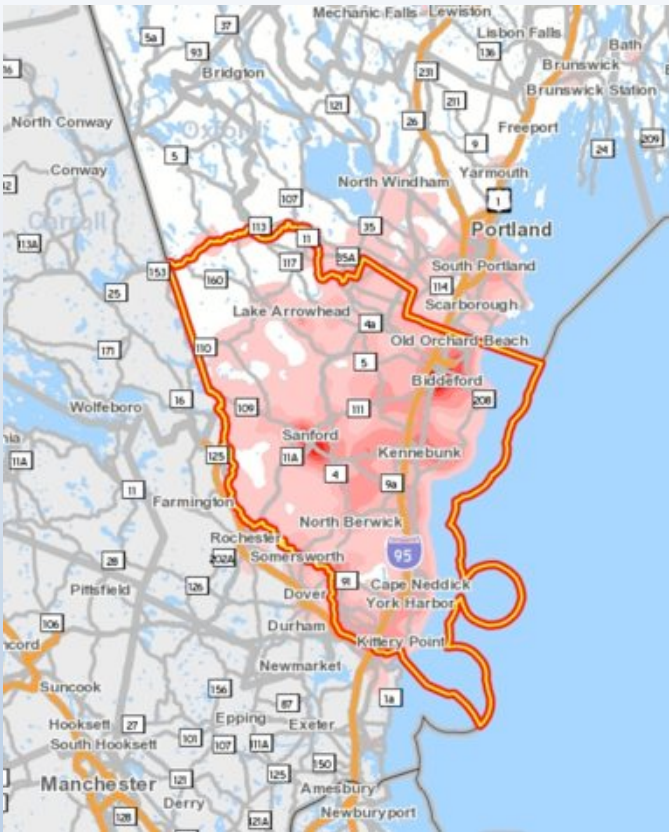


Economic Context



Commute Patterns

Where do York Co Workers Live?



Residential Location	Share of Workers
York County	70.4%
<i>Biddeford</i>	9.0%
Saco	7.0%
<i>Sanford/S Sanford/Springvale</i>	9.6%
Cumberland County	13.1%
New Hampshire	6.4%
Elsewhere	10.1%

Patterns of Growth

Source: An Economic Development Strategy for the SMRPC Region, Planning Decisions Inc., 2004

Rural Areas

P.C. Income, 2003 = \$28,800

Income Growth, 1992-2003 = 54%

Natural Increase, 2000-2004 = -11,400

Net Migration, 2000-2004 = 8,800

Suburban Borderline

P.C. Income, 2003 = \$31,600

Income Growth, 1992-2003 = 72%

Natural Increase, 2000-2004 = 19,400

Net Migration, 2000-2004 = 57,900

Satellite Centers

P.C. Income, 2003 = \$35,100

Income Growth, 1992-2003 = 85%

Natural Increase, 2000-2004 = 35,200

Net Migration, 2000-2004 = 41,400

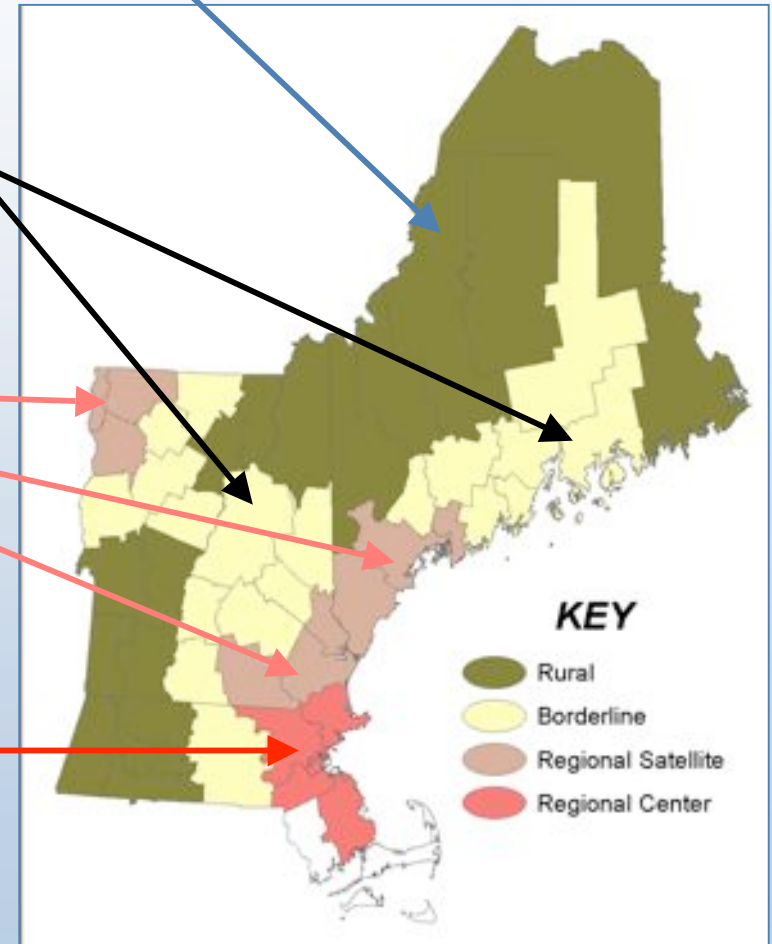
Regional Center (Greater Boston)

P.C. Income, 2003 = \$43,800

Income Growth, 1992-2003 = 73%

Natural Increase, 2000-2004 = 25,400

Net Migration, 2000-2004 = -72,500



Maine's Low Share

Share of Private Non -Farm Earnings by Region, 2003

Sources of Earnings	Regional Center	NH Satellite	ME Satellite	Vermont Satellite
Fabricated Metal Products	1.13%	1.90%	1.14%	2.49%
Machinery	0.95%	1.50%	0.67%	1.58%
Computer & Electronic Products	5.53%	9.20%	2.57%	13.50%
Electrical Equipment	0.38%	1.36%	0.28%	0.44%
Chemicals & Medicine	1.13%	0.56%	0.89%	0.59%
Plastics and Rubber Products	0.23%	1.25%	0.65%	0.00%



Metals & Medicine

Relative Size of Manufacturing by Region, Selected Sectors, 2002

NAICS Code	Description	Establishments	Sales (\$1,000)	Payroll (\$1,000)	Employees
Portland Satellite					
332	Fabricated Metal Products	113	\$380,045	\$87,118	2,321
333	Machinery	44	\$243,229	\$60,260	1,591
334	Computer & Electronic Products	32	\$504,020	\$141,897	3,195
335	Electrical Equipment	D	D	D	D
Pharmaceuticals &					
3254	Medicine	14	\$130,396	\$47,803	971
3391	Medical Equipment & Supplies	21	\$37,403	\$11,888	316
Total		224	\$1,295,093	\$348,966	8,394
Cambridge-Framingham Metropolitan Division					
332	Fabricated Metal Products	356	\$1,323,094	\$304,631	7,024
333	Machinery	169	\$1,455,041	\$406,568	7,753
334	Computer & Electronic Products	398	\$11,800,758	\$2,164,508	36,053
335	Electrical Equipment	62	\$393,511	\$119,843	2,908
Pharmaceuticals &					
3254	Medicine	29	\$988,188	\$184,424	2,924
3391	Medical Equipment & Supplies	111	\$1,007,128	\$238,489	4,896
Total		1,125	\$16,967,720	\$3,418,463	61,558

Development Trends

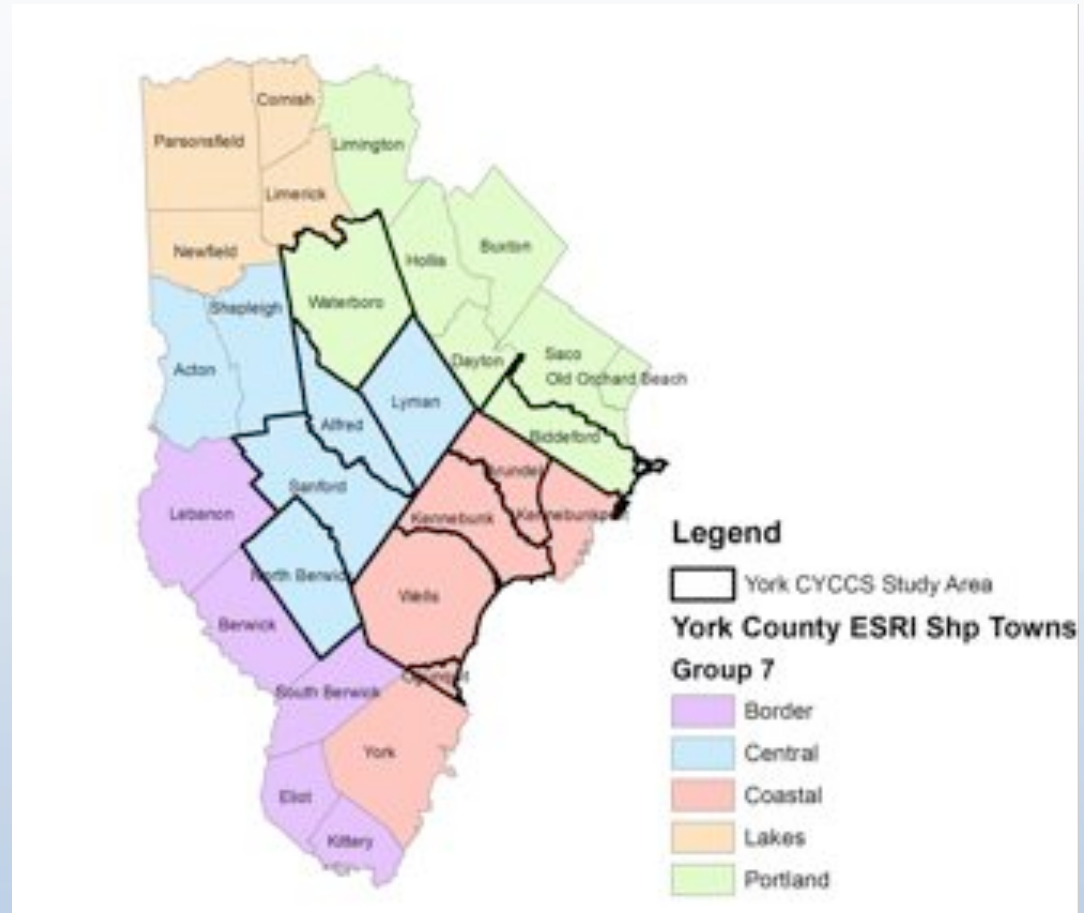


Factors Used to Cluster Communities

- Commuting patterns
- Population growth trends
- Metro area proximity

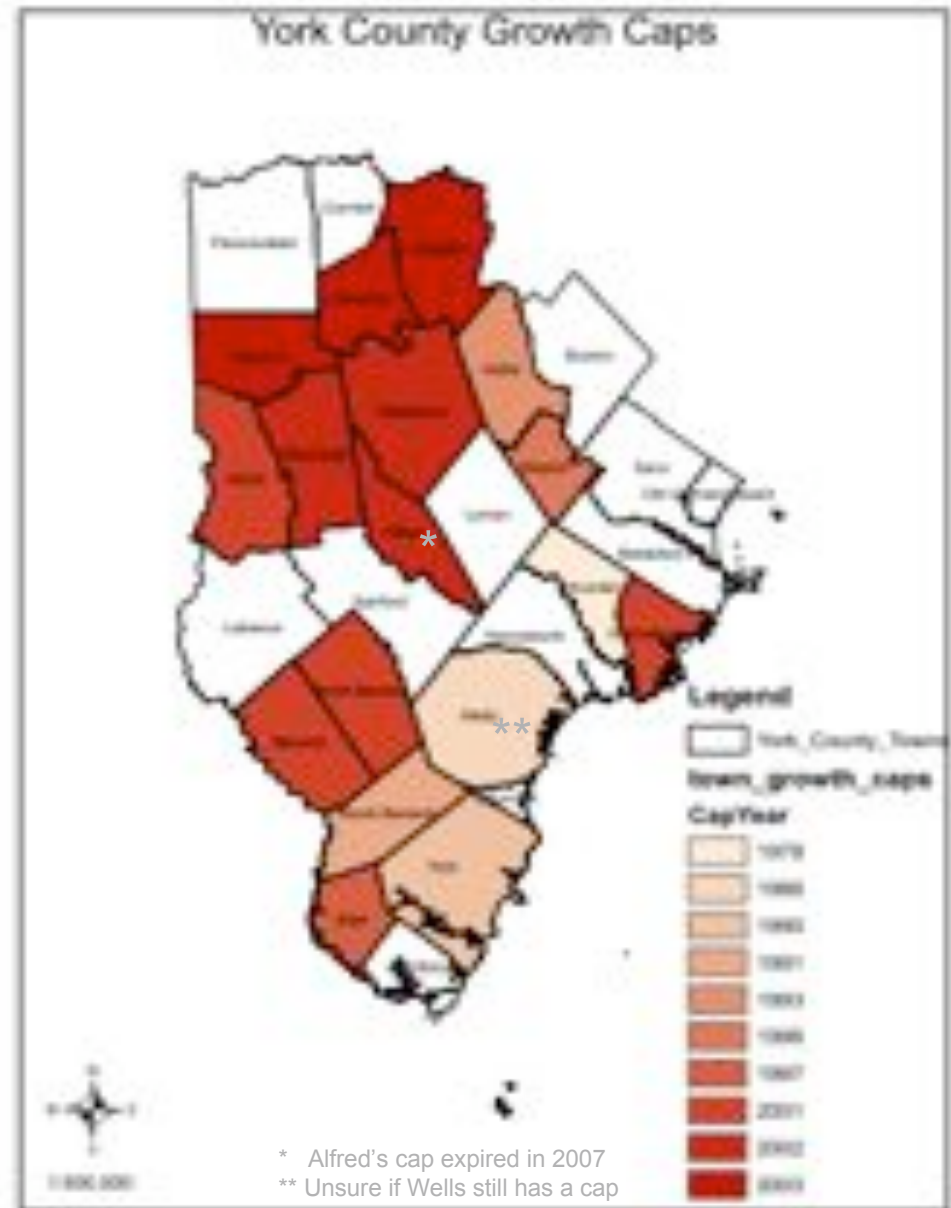
How does the region cluster?

- Proposed subareas for allocating future growth projections



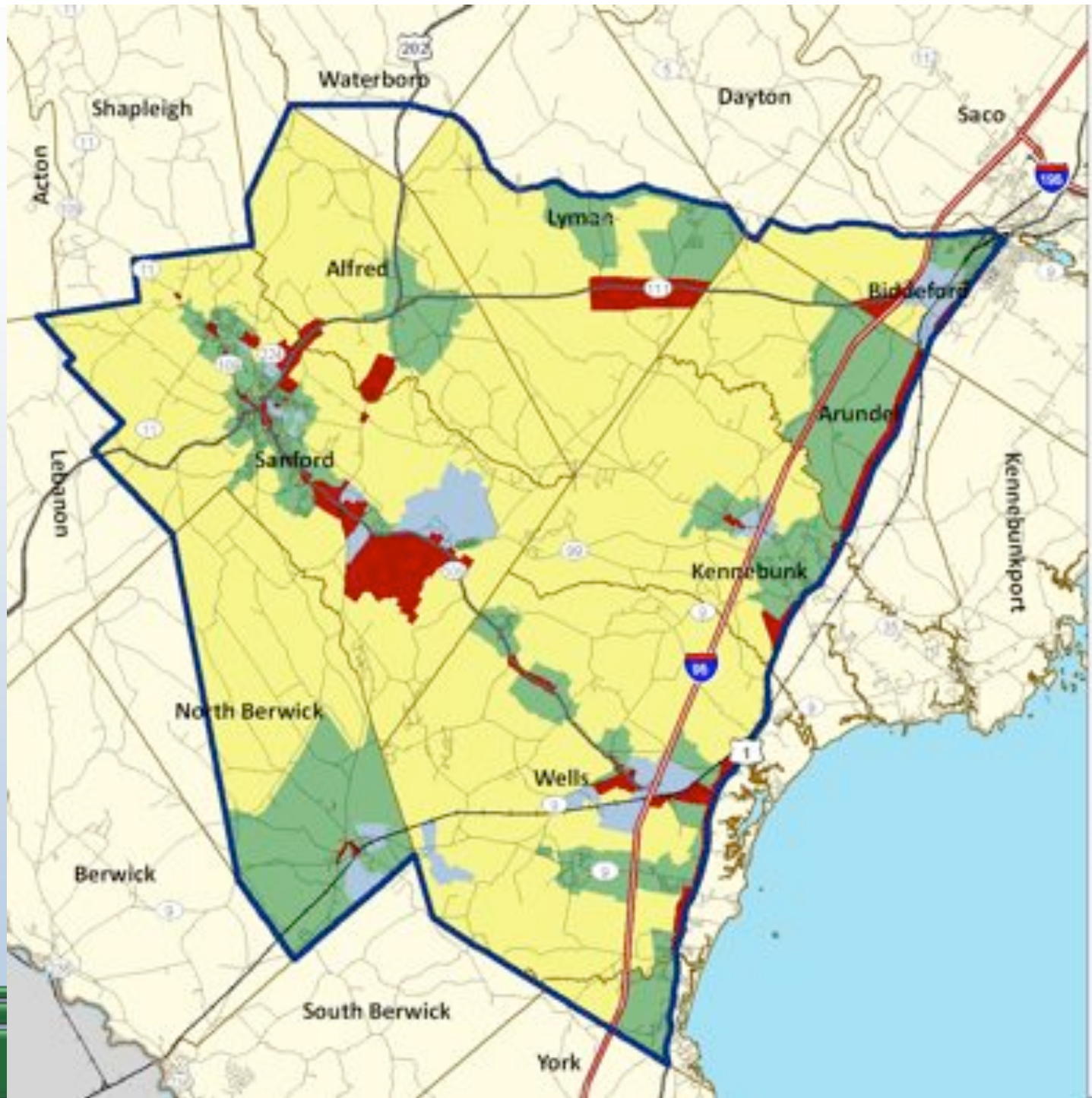
Discussion: Effect of Growth Caps in projecting the future

Need assumptions – e.g. keep all caps for 25 years; or come off at some time to see their effect e.g. after 10 years; or assume when they come up for renewal and need school subsidies for revenue and want growth.....timing important; how should we treat it?



Planning, Zoning and Access Management





Generalized Zoning

Data Source: SMRPC
 Updated: November 17, 2010

- Rural
- Commercial/Mixed Use
- Industrial
- Residential
- Study Area
- Limited Access
- US & State Highways
- Other Roads
- Town Boundary
- Railroad



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How Do Current Plans and Codes Support the Study's Purpose and Need?

- Reviewing current Plans and codes shows potential impacts of land use on road network capacity and efficiency
- Understanding where there is consistency *or* conflict with the P&N will help shape Phase II recommendations for improving land use and access management
- Review therefore focused on how Plans addressed a set of very specific questions...

What We Found: Key Best Practices In Place or Required (Not Just “Encouraged”)

- Orderly Zoning ---minimal scattering of commercial and light industrial
 - Biddeford, Sanford, North Berwick, Ogunquit, Kennebunk, Wells, Arundel
- Future Land Use Map and Current Zoning Highly Consistent
 - Biddeford, Kennebunk, Ogunquit, Sanford
- Limited Access to at least Some Specified Roads
 - Alfred, Lyman, Biddeford, Kennebunk, North Berwick, Ogunquit, Sanford
- Open Space Zoning (in at least some districts)
 - Alfred, Sanford, Wells, Kennebunk, Ogunquit

Best Practices Sometimes in Place

- Access location requirements for different uses
- Phasing of development to better manage traffic issues
- Connectivity required between adjacent uses or for access needs of major subdivisions
- Visual character of highway frontages
- Environmental and Cultural Resource Protection Guidelines
 - Environmental generally more specific than cultural
- Thoroughness of development plan review coverage
- Several towns require comparison of conventional and cluster plans as part of approval process
- Sunset provisions for dormant subdivisions

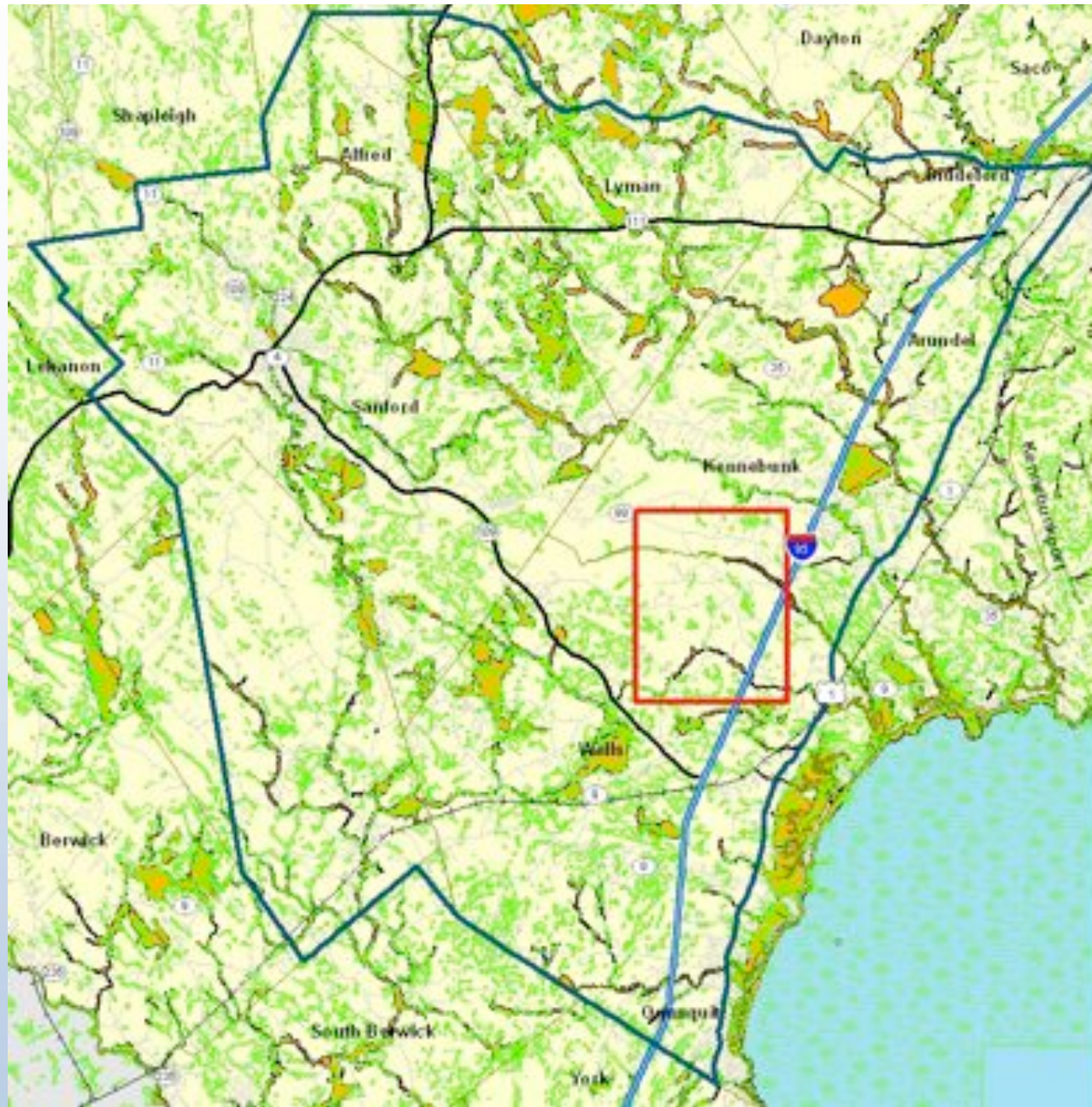
Main Issues Needing More Attention

- Stripping of Commercial Uses
 - Policies and zoning to shift traditional pattern to more nodal one for new and redeveloped uses
- Consistent linking of access management requirements to functional classification map
 - Apply to both commercial and residential uses
 - More consistent standards and applicability across the study area

Both these issues have direct impacts on managing traffic volumes and flows

Environmental and Cultural Resources





Wetland and Floodplain

Data Source: SMIRPC

Updated: November 15, 2010

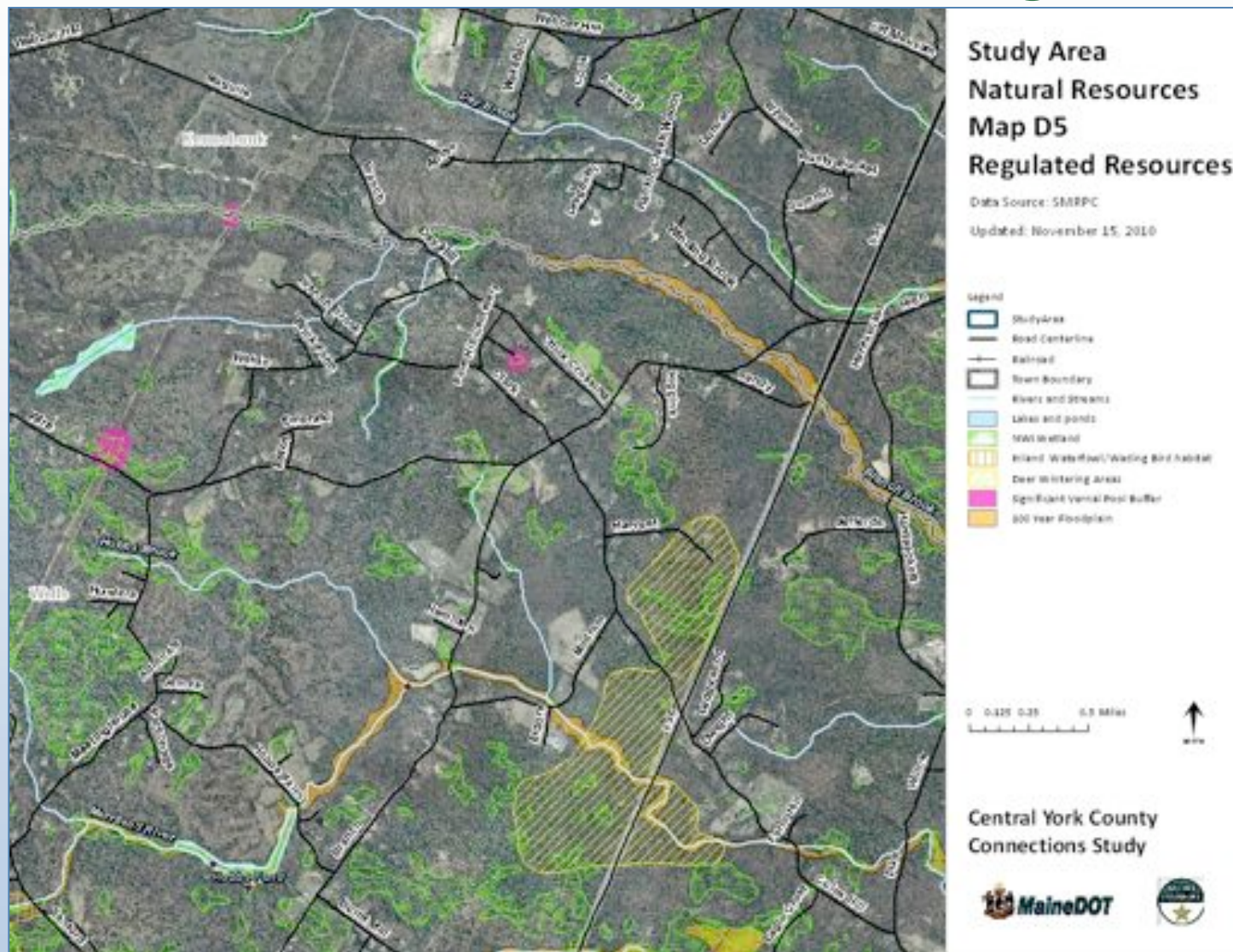
-  Non-wetland
-  100 Year Floodplain
-  Location of May 08
-  Study Area
-  Town Boundary
-  Interstate
-  Major Road
-  Road Centerline
-  Railroad



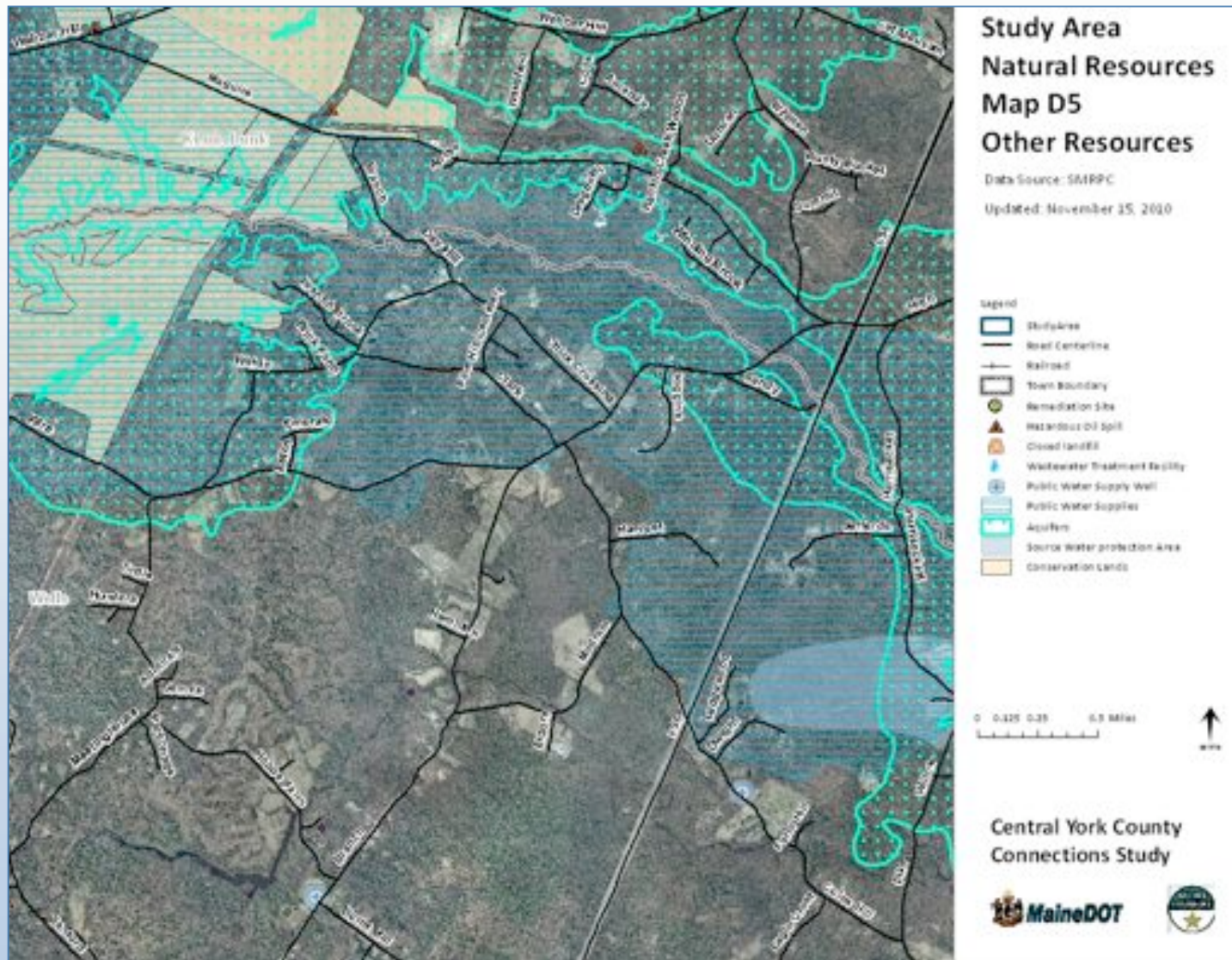
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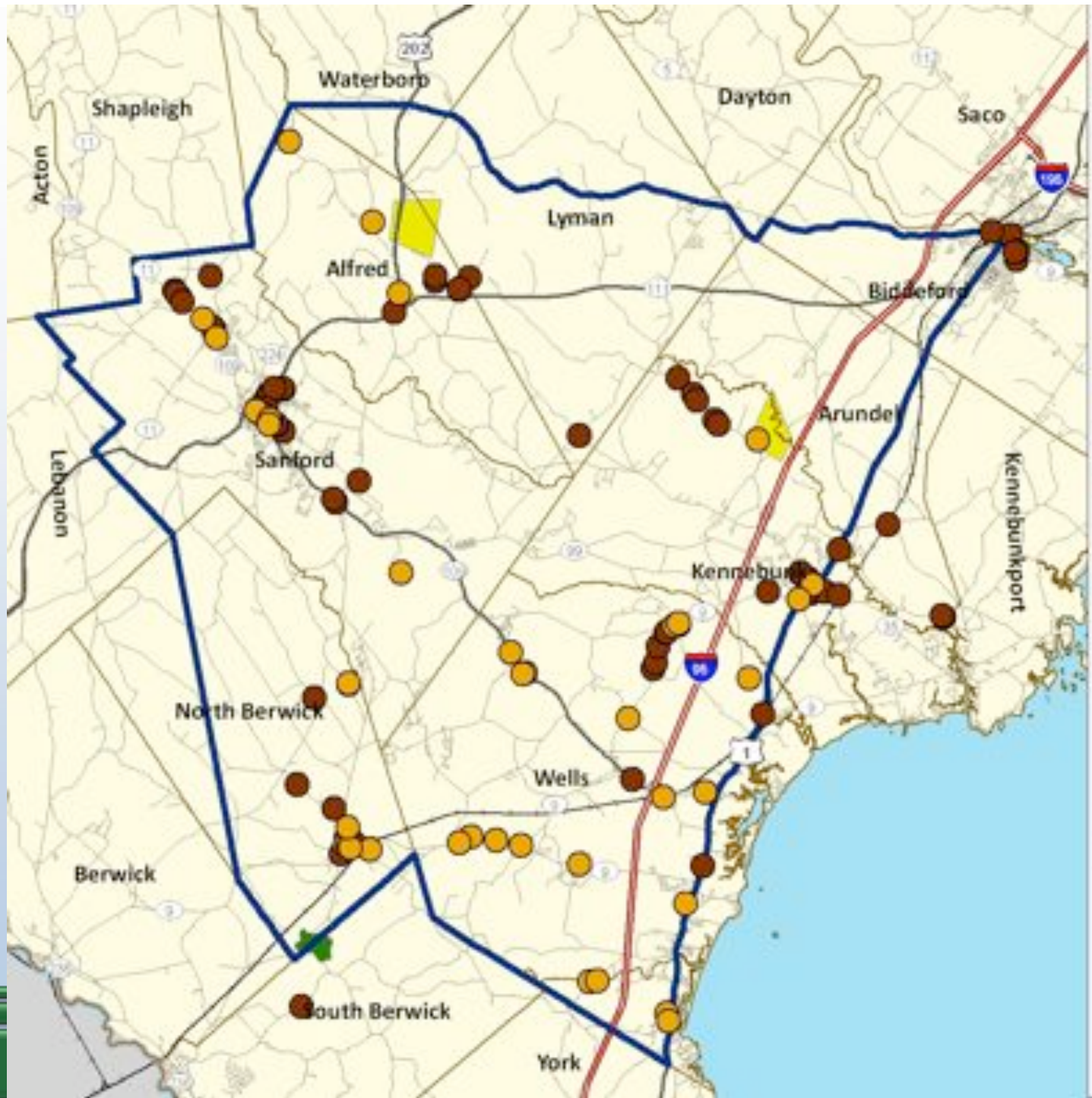


Environmental resources – regulated



Environmental resources – Other

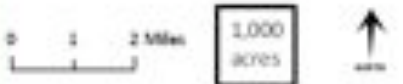




Historical Resources

Data Source: SMRPC
 Updated: November 18, 2010

- National Register Historic Site
- National Register Eligible Site
- National Register Historic District
- National Register Eligible District
- Study Area
- Town Boundary
- Limited Access
- US & State Highways
- Other Roads
- Railroad

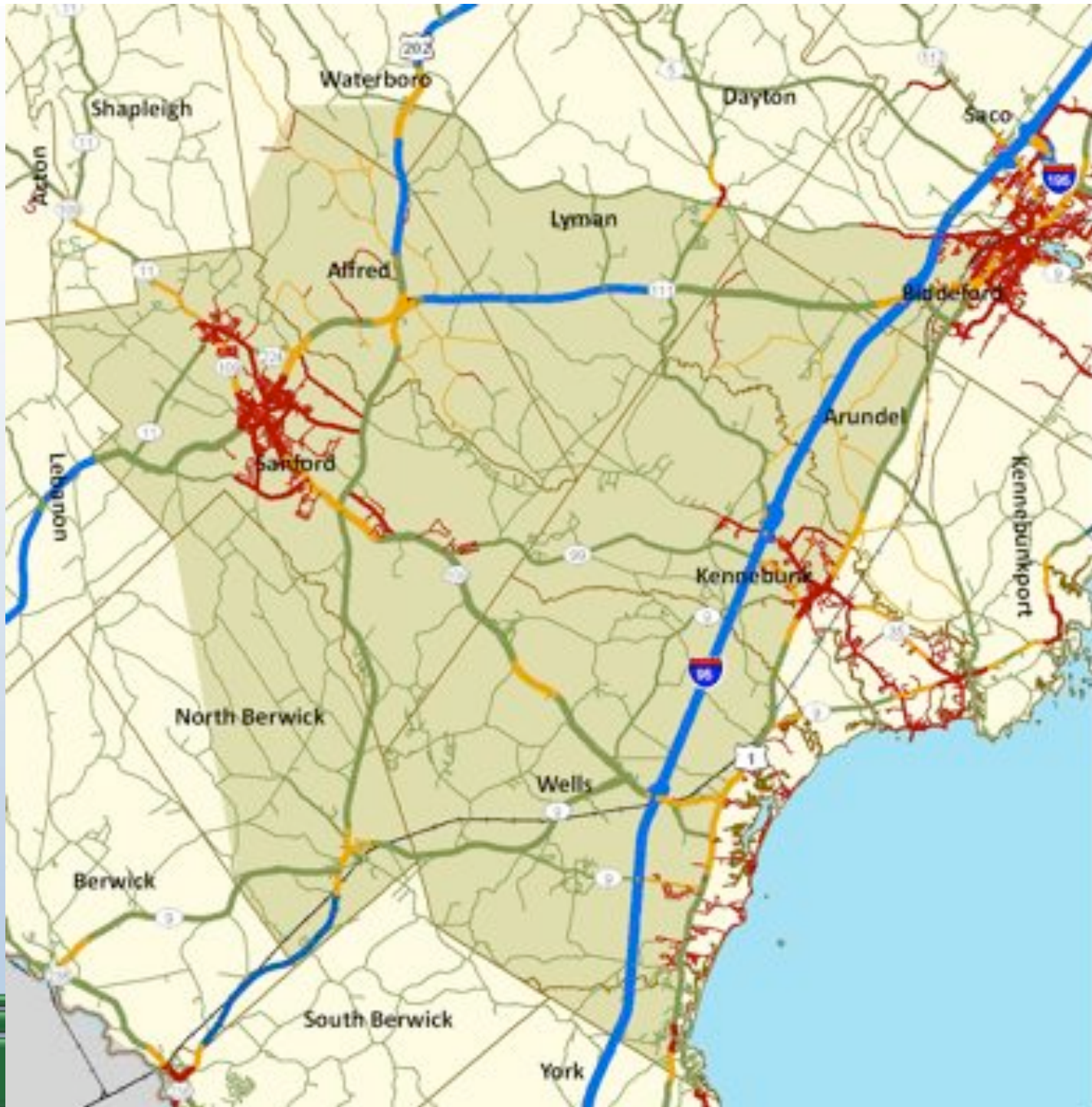


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Transportation

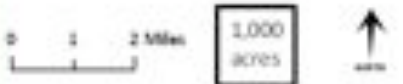




Street Classification and Speed Limit

Data Source: MaineDOT
 Updated: November 22 2010

- Street Classification**
- █ Principal Arterial - Interstate
 - █ Other Principal Arterial
 - █ Minor Arterial
 - █ Major Collector
 - █ Minor Collector
 - █ Local
- Posted Speed Limit**
- █ 25 mph and below
 - █ 30 - 35 mph
 - █ 40 - 50 mph
 - █ 55 mph and above
- Town Boundary
- Study Area



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Current (2009) Traffic Volumes

Data Source: MaineDOT
Updated: November 22, 2010



- Average Annual Daily Traffic
- Interstate (Shown at 1/2 AADT)
- Town Boundary
- Railroad
- Study Area

0 1 2 Miles

1,000
ACRES

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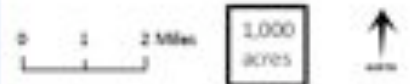
Planning Stage Level of Service (LOS)

Daily AADT/Hourly Capacity

Data Source: MaineDOT
Updated: November 22, 2010

Daily AADT/Hourly Capacity

- A or B (0.00-2.50)
- C (2.51-4.00)
- D (4.01-6.00)
- E, At Capacity (6.01-10.00)
- F, Over Capacity (10.01+)
- Town Boundary
- Study Area



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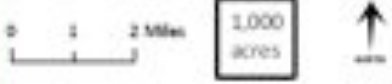




CYCCS Crash History 2007-2009

Data Source: MaineDOT
 Updated: November 29, 2010

- Fatality
- Incapacitating
- Non-incapacitating
- Possible Injury
- Property Damage Only
- Study Area
- Town Boundary
- Railroad



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CYCCS Crash History 2007-2009 (Injuries Only)

Data Source: MaineDOT
Updated: November 19, 2010

- Fatality
- Incapacitating
- Non-incapacitation
- Study Area
- Town Boundary
- Railroad



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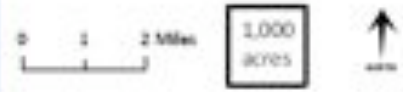


High Crash Locations (2007-2009)

Data Source: MaineDOT
 Updated: November 22, 2010



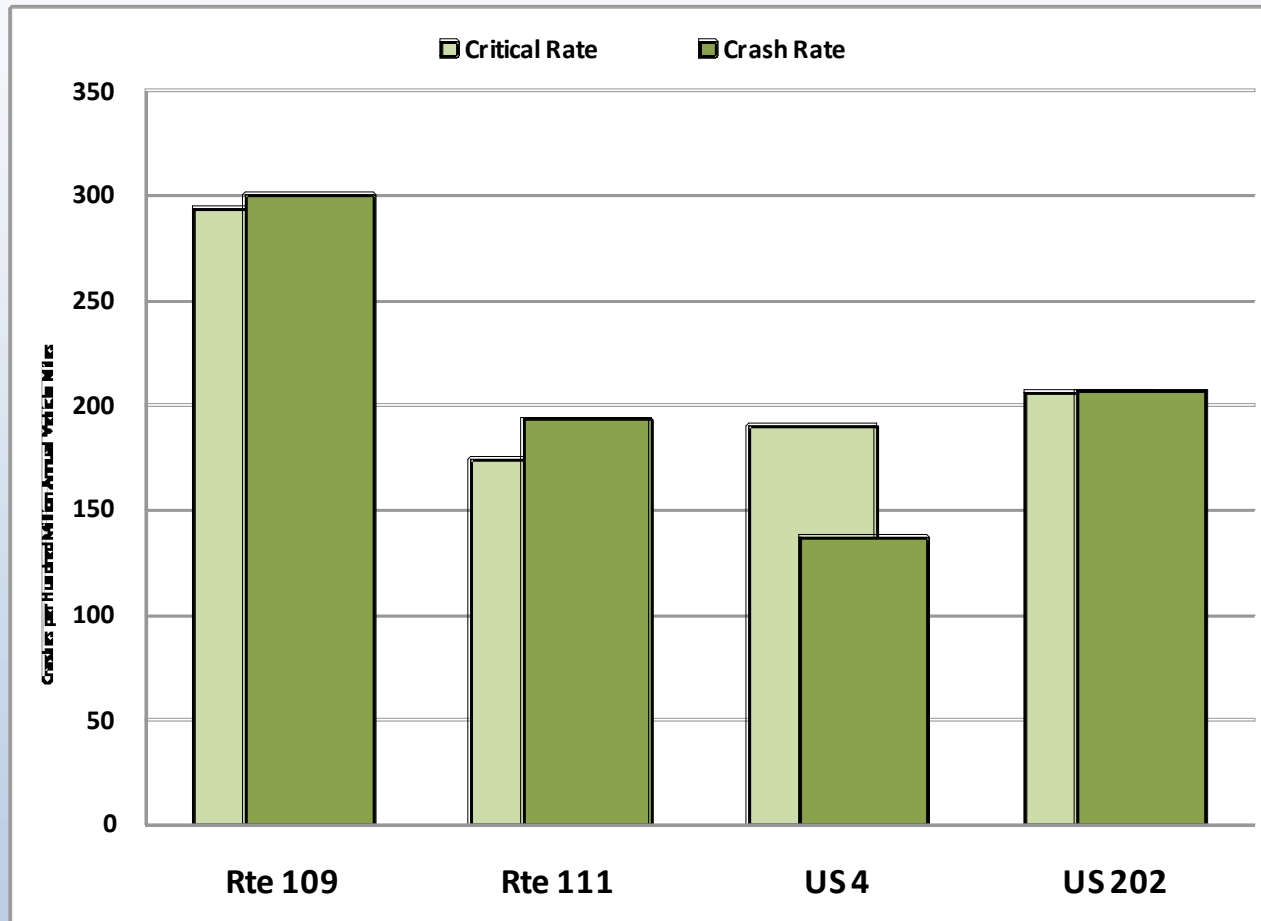
- Intersections
- Road Segments
- Town Boundary
- Study Area



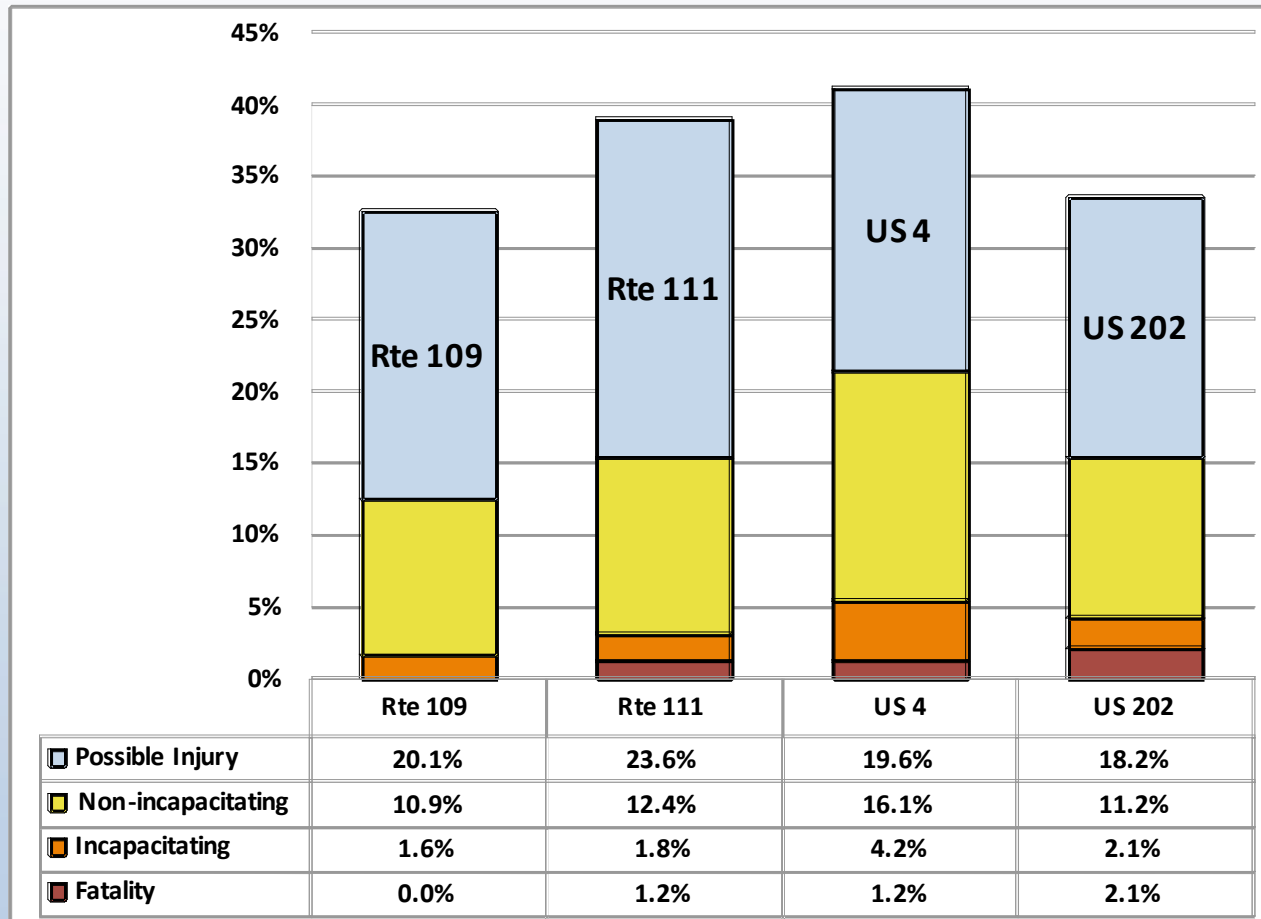
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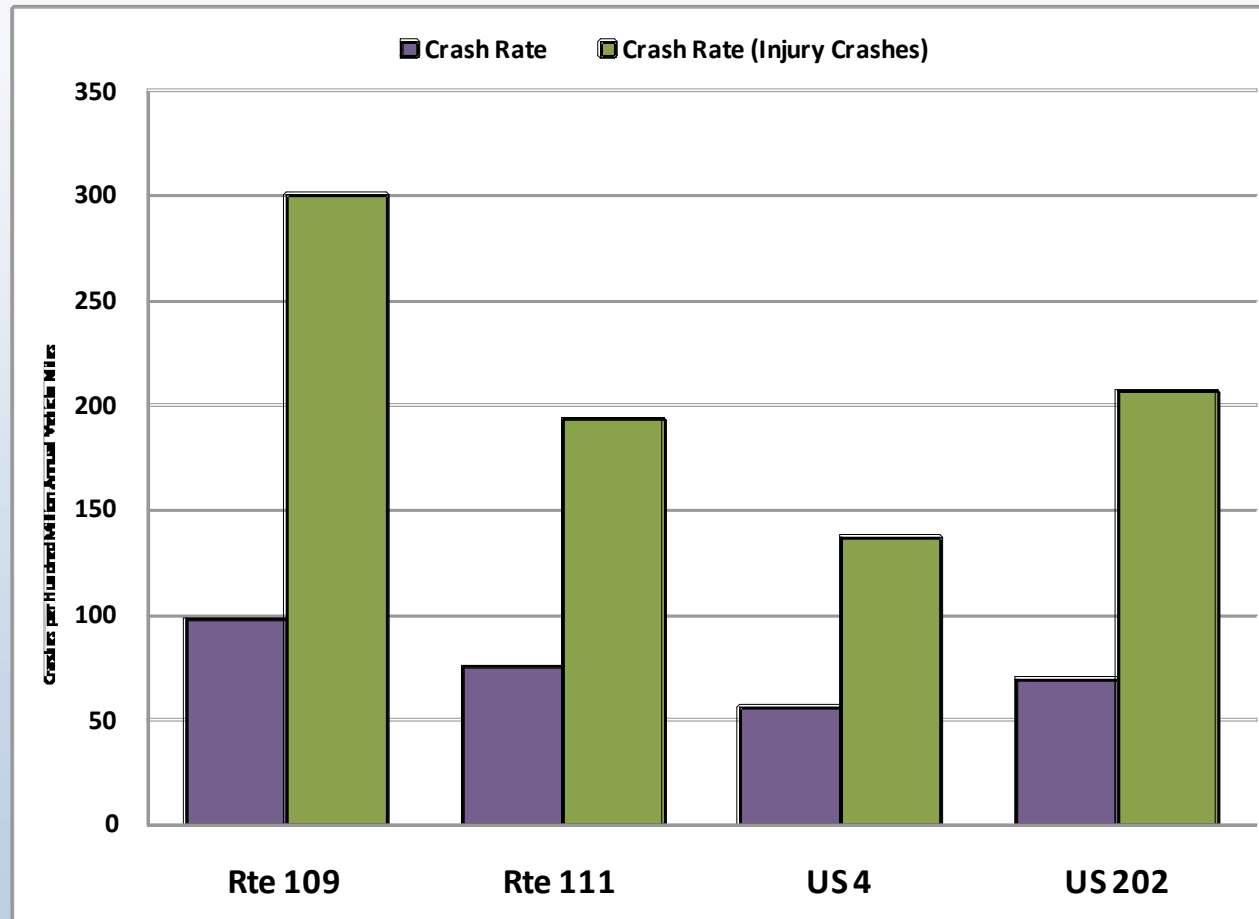
Corridor Crash Rates



Share of Crashes with Injuries



Composite Crash Rate – Injury Crashes



Crash Types

	Rte 109	Rte 111	US 4	US 202
Read End/Sideswipe	56.0%	52.3%	56.0%	29.9%
Head-on/Sideswipe	3.4%	3.6%	3.4%	5.6%
Intersection/Turning	22.2%	20.8%	22.2%	28.5%
Ran off Road	10.1%	13.6%	10.1%	18.8%
Animal	2.0%	4.2%	3.9%	9.7%
Bike/Ped	3.6%	0.0%	0.2%	4.2%
Other	2.7%	5.4%	4.1%	3.5%

Crash Locations

	Rte 109	Rte 111	US 4	US 202
Straight-away	31.1%	34.4%	37.5%	26.4%
Curve	3.2%	1.2%	6.5%	13.9%
Intersection	49.1%	55.0%	47.6%	53.5%
Driveway	16.0%	8.8%	8.3%	6.3%
Other	0.5%	0.6%	0.0%	0.0%

Bus Services

Bus Service/Route	Characteristics
BIDDEFORD AREA	
ZOOM Turnpike Express	Links Biddeford and Saco P&R locations to Portland
ShuttleBus Intercity	Biddeford to Portland with intermediate stops
ShuttleBus Local	Local service within Biddeford, Saco and Old Orchard Beach
SANFORD AREA	
Sanford Ocean Shuttle	Daily scheduled service between Sanford and Wells
Sanford Transit “My Bus”	Local daily scheduled service within Sanford and Springvale
The WAVE	York Co Community Action Corp. reservation service. <ul style="list-style-type: none"> •Service to Biddeford for jobs, medical, school and shopping trips. •Service to Wells for jobs, medical, and school trips.
WELLS/K’BUNK/OGUN.	
Summer Season Shuttles	Shoreline Trolley and Kennebunk Shuttle

Summary Highlights – Our take:

- **Economic Context:** SW vs. NE orientation an open, valid question
- **Development Trends:** the study area divides well into 5 spheres of influence
- **Plans and Codes:** a mixed bag in terms of support for P&N
- **Environmental and Cultural Resources:** these are widely spread throughout the study area
- **Transportation:** most all congestion and half the crashes are limited to key intersections; corridor safety ranking - Rtes.109, 111, 202, 4.

Measures of Effectiveness – An Example

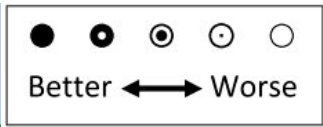
(Also called Indicators, Criteria,
Performance Measures....)

How do the Various Development Patterns Stack up?




(Comparative Rank of the MOEs in the Gateway 1 Plan)

	Mobility				Accessibility			Town Core				Environment/Scenic			
	VMT	Local Roads ¹	LOS	Transit	Jobs	Retail	EMS	Housing	Jobs	Bike	Pedestrian	Acres developed	Habitat developed	Views Protected	Strip Commercial
Low Density 2030	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○
Micropolitan	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●
Transit Oriented Corridor	●	●	○	●	●	●	●	●	●	●	●	●	●	○	○
Community Centered Corridor (CCC)	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●
CCC (w/Tr. Package)	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●

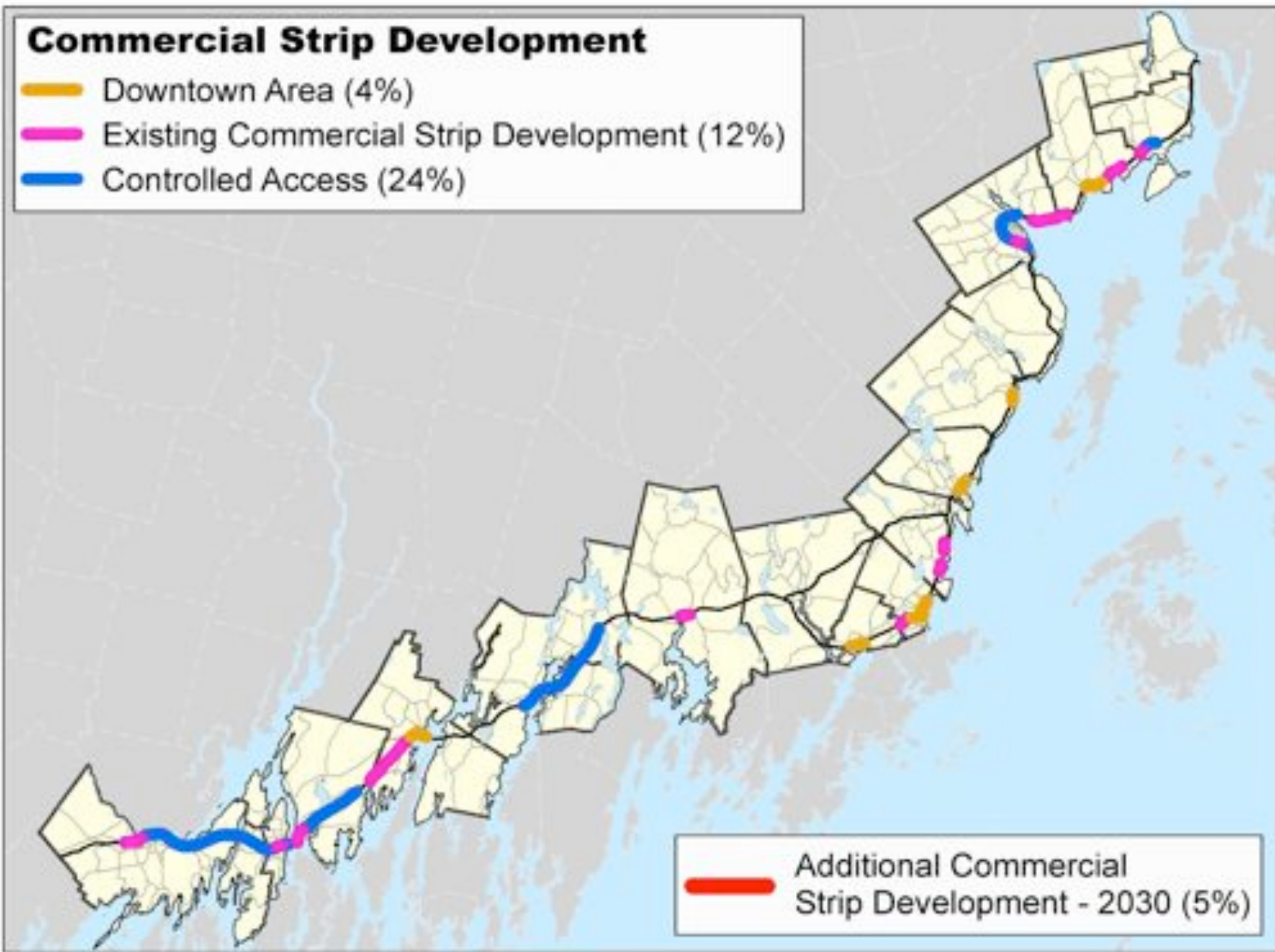
1. Local roads which exceed 2000 VPD



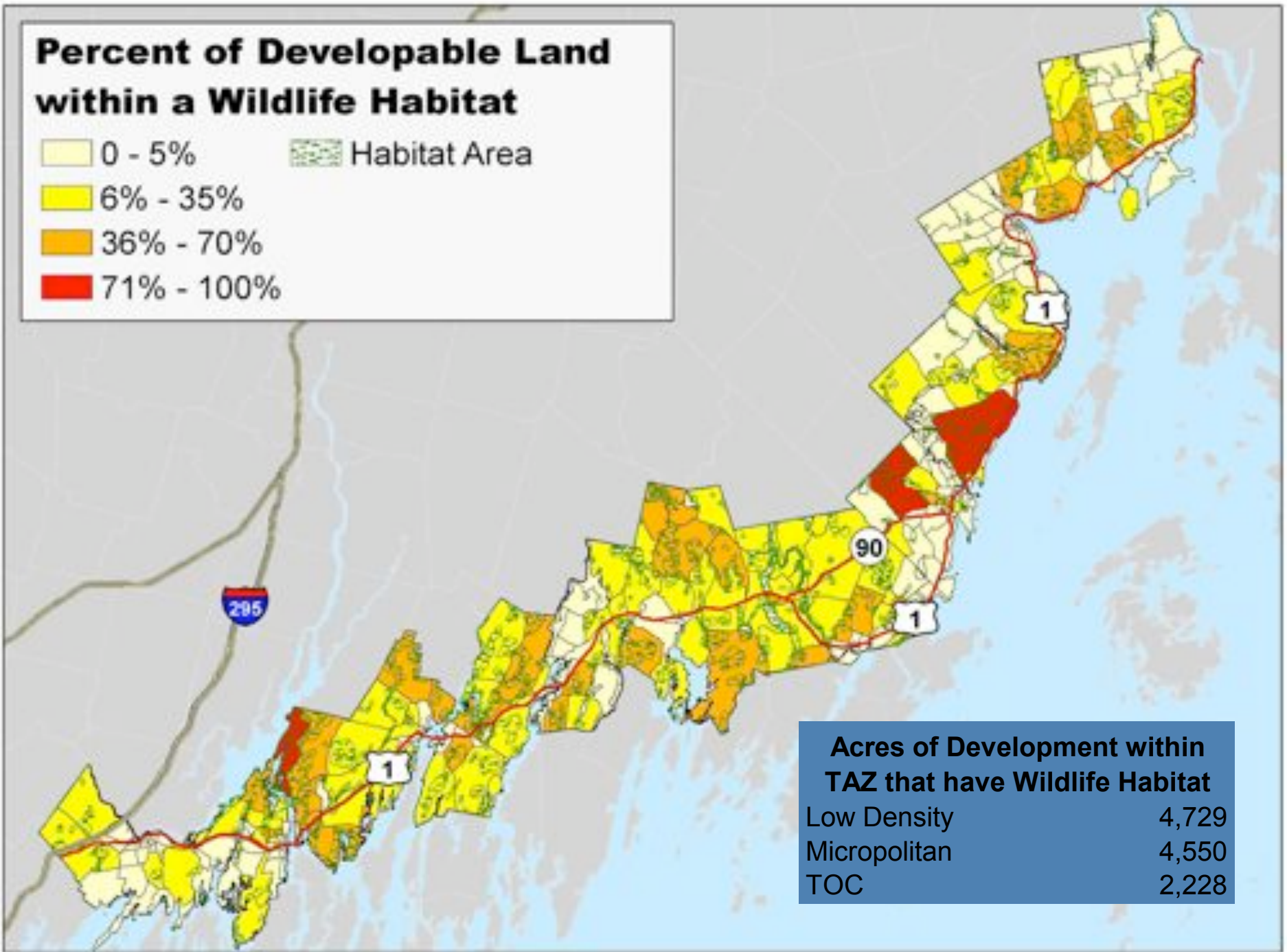
Commercial Strip Development

-  Downtown Area (4%)
-  Existing Commercial Strip Development (12%)
-  Controlled Access (24%)

-  Additional Commercial Strip Development - 2030 (5%)



Percent of Developable Land within a Wildlife Habitat



Acres of Development within TAZ that have Wildlife Habitat

Low Density	4,729
Micropolitan	4,550
TOC	2,228

Applying MOEs to this Study

An Example

Example of How P&N Ripples through the Study

Purpose & Need Element	Goals related	Objectives	MOEs	Source
Economic Development	Increase job base in Central York Co.	Target the most likely kinds of job growth to Towns seeking such growth	<ul style="list-style-type: none"> • # jobs by type/location • \$ impacts of jobs by type/location • # and \$ of spinoff secondary jobs by type/location 	<ul style="list-style-type: none"> • PRISM • PRISM • PRISM
		Manage associated pop. growth	<ul style="list-style-type: none"> • # pop and dus generated by new jobs 	<ul style="list-style-type: none"> • PRISM

Candidate MOEs for Stage One

- **Travel times and delay** – changes in accessibility estimated from travel forecasting model outputs summarized for key origin-destination pairs.
- **Travel patterns and capacity** – Changes in traffic volumes on other routes. Segment volume-to-capacity comparisons.
- **Improved transit access** – Corridor improvements which support enhanced transit potential.
- **Costs** – gross approximation of capital costs including ROW sufficient to identify major cost differences among the concepts evaluated.
- **Economic Impact** – changes in economic output and activity (\$) estimated from the PRISM model.

Candidate MOEs for Stage One (Cont.)

- **Structures impacted** – residential and non-residential structures affected; generalized assessment (High/Medium/Low).
- **Environmental impacts** – Composite assessment of proximity to floodplains, wetlands, steep slopes, rare/threatened/endangered species (RTE).
- **Rural and urban character impacts** – composite of cultural resources, rural areas opened up and current centers reinforced, consistent with the policies & future land use maps of local comp. plans and with the goals of the Growth Management Act.
- **Safety** – Do improvements address known High Crash Locations and crash types?
- **Consistency with STPA** - (*i.e. capacity expansion as last resort*)
- **Implementability** – Likelihood of community acceptance and support (consistency with plans, zoning and public response).

Next Steps

- Make economic forecasts
- Develop initial range of corridor concepts
- Review these with AC and SC and refine concepts
- Set up travel and economic impact models
- Determine impacts (Stage One MOEs)
- Next SC and AC Meeting: Wednesday, January 19th
- First Public Meeting: Thursday January 20th