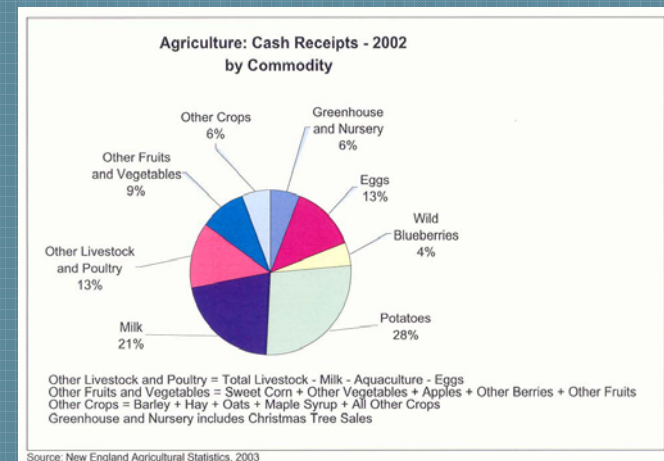# Tug Hill Indicators

# Why Indicators?

- <u>More information is available digitally</u> than in previous years – 2004 CTHC Resource Inventory, Black River projects (asset mgmt., blueway trail, sewer/water projects, etc.), Route 3 sewer project, Salmon River Watershed Natural Resource Inventory, others)

- <u>Investments in new GIS technology</u> allowing live, on-line GIS information for local officials

- <u>Potential</u> to provide improved service to communities for better-informed decision-making

# What is an Indicator?

- **Ongoing**, consistent measurement
- **Quantifiable**
- **Illustrates a trend** over time
- **Incorporated** into active community planning processes

- *NOT a one-time portrait or snapshot, such as in an atlas or inventory*



Agriculture: Cash Receipts - 2002 by Commodity

Other Crops 6%
Greenhouse and Nursery 6%
Other Fruits and Vegetables 9%
Eggs 13%
Wild Blueberries 4%
Other Livestock and Poultry 13%
Potatoes 28%
Milk 21%

Other Livestock and Poultry = Total Livestock - Milk - Aquaculture - Eggs
Other Fruits and Vegetables = Sweet Corn + Other Vegetables + Apples + Other Berries + Other Fruits
Other Crops = Barley + Hay + Oats + Maple Syrup + All Other Crops
Greenhouse and Nursery includes Christmas Tree Sales

Source: New England Agricultural Statistics, 2003

# Indicators of Maine's Natural Resource-based Industry at a Glance

| sector | issue | indicator | trend | page |
|--------|-------|-----------|:-----:|:----:|
| cross-sector | our economy | 1. Output as a Portion of Gross State Product | − | 12 |
| | our natural resource | 2. Number of Communities Designated Urban | − | 14 |
| | our communities | 3. Full- and Part-time Employment | + | 16 |
| agriculture | our economy | 4. Net Farm Income | − | 20 |
| | our natural resource | 5. Acres of Productive Cropland | − | 23 |
| | our communities | 6. Number of Farmers' Markets | + | 25 |
| fisheries & aquaculture | our economy | 7. Value of Fishing Landings | + | 30 |
| | our natural resource | 8. Biomass of Lobsters | 0 | 35 |
| | our communities | 9. Working Waterfront Property Values | − | 39 |
| forest products | our economy | 10. Capital Investment in Paper Mills | 0 | 42 |
| | our natural resource | 11. Cords of Merchantable Timber | + | 46 |
| tourism/ recreation | our economy | 12. Number of Overnight Marketable Trips | + | 56 |

note: plus sign indicates positive trend; minus sign indicates negative trend; zero indicates no discernible trend

# The Most Effective Indicators

- ***Relevant*** –relate to specific community goals, strategies, and/or quality of life issues; have concrete meaning to you and to community members

- ***Easy to understand***

- ***Reliable*** – the information is trustworthy and collected consistently over time

- ***Based on accessible data*** - the information is available or can be gathered in a timely fashion, will be available for the foreseeable future, and there is time to take meaningful action

# Indicator Categories

- Land Use
- Economic Infrastructure
- Built Infrastructure
- Nature/Green Infrastructure
- Social Vitality
- Health and Safety
- Education
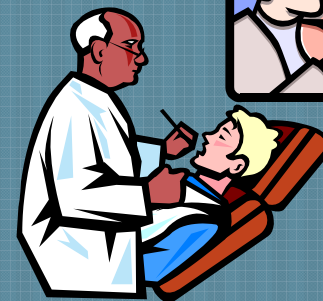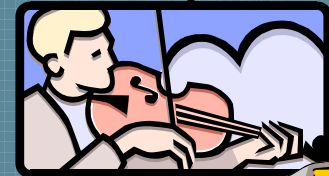
# Land Use
## Indicator Examples

- Tax parcels by property class
- Acreage by property class
- Net annual change in number of tax parcels (subdivision activity)
- Acreage of &/or number of parcels that are tax exempt
- Acres of protected open space as a percentage of the total
- Acres of intact forest, agricultural, industrial, etc. land as a percentage of the total

SUBDIVISION

RESOURCE
INVENTORY
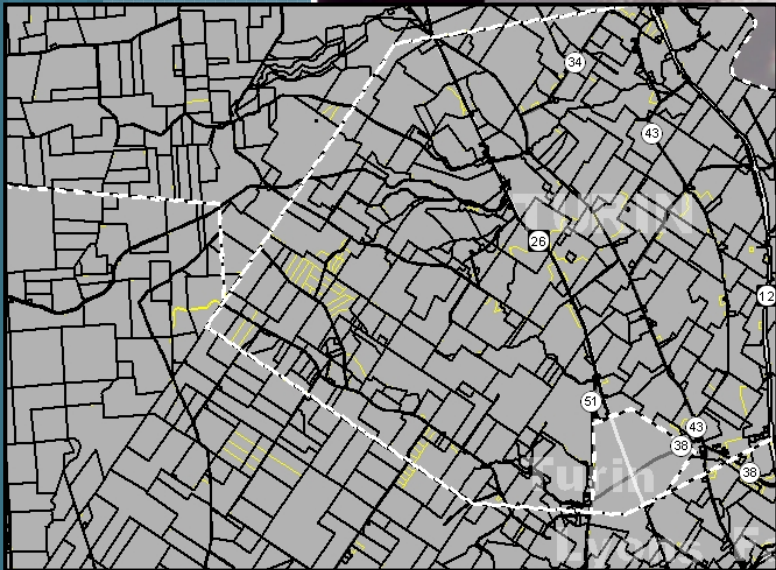
# Economic Infrastructure
## Indicator Examples

- Number of jobs per industry (forest products, agriculture, recreation, tourism, retail, etc.)
- Earned wages per industry
- Number and range in amount of deposits in local banks
- Percentage of resident population at or below poverty level
- Total food stamp payments
- Number of proprietors in the workplace

Payroll Employment by Industry
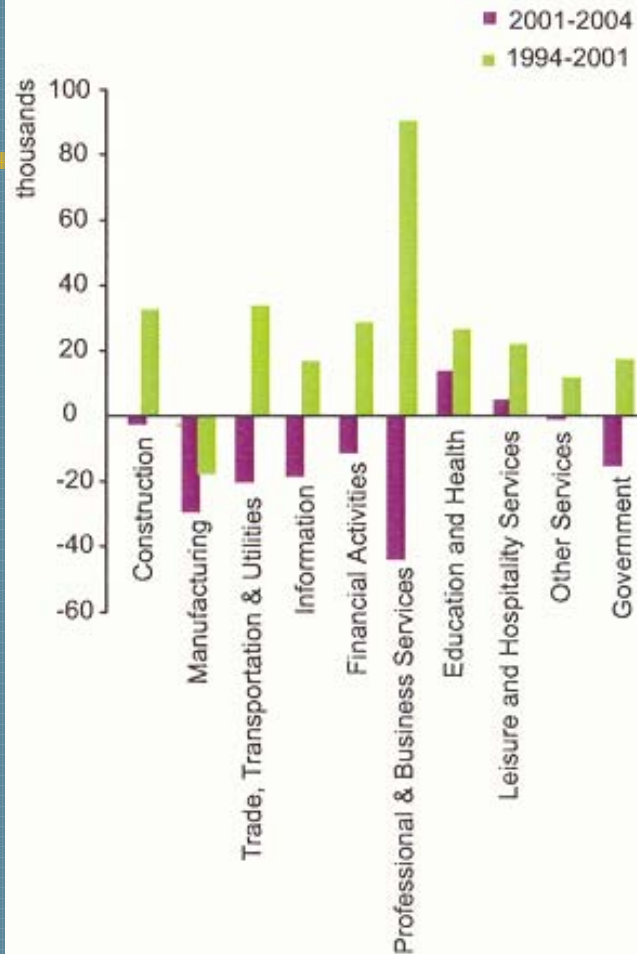Net Change, 1994 - 2004
Metro Boston

- 2001-2004
- 1994-2001

thousands

Construction
Manufacturing
Trade, Transportation & Utilities
Information
Financial Activities
Professional & Business Services
Education and Health
Leisure and Hospitality Services
Other Services
Government

Source: U.S. Bureau of Labor Statistics, State and
Area Employment. Data for Boston CMSA.

Payroll Employment by Industry
Net Change, 2002-2004
City of Boston

- 2002-2003
- 2003-2004

Construction
Manufacturing
Trade, Transportation & Utilities
Information
Financial Activities
Professional and Business Services
Education and Health
Leisure and Hospitality
Other Services
Government
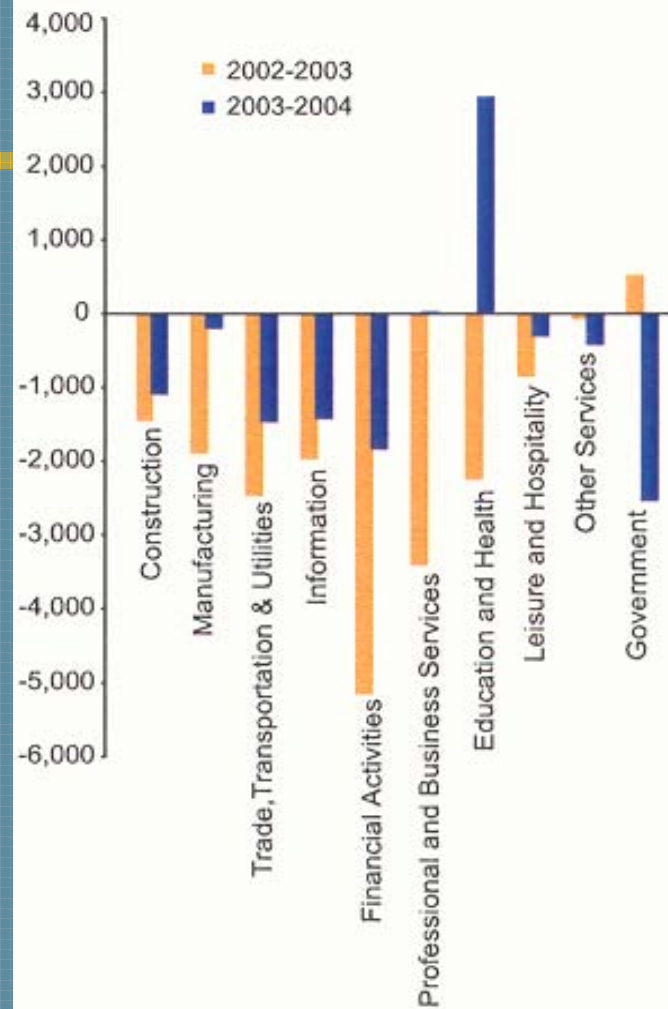
Source: Massachusetts Department of Unemployment,
ES-202 Data for second quarter of each year.

# Built Infrastructure
## Indicator Examples

- Major highway traffic counts
- Miles of paved road, miles of unpaved road
- Miles of recreation trails by type
- Total housing units, units by type
- Age of housing
- Annual expenditures for continued maintenance of municipal water and/or sewer system
- No. of developable units on water and/or sewer system
- Number of buildings on state/federal historic register
- Internet/cell phone service coverage and cost

Great Bend, NY

# Green Infrastructure
Indicator Examples

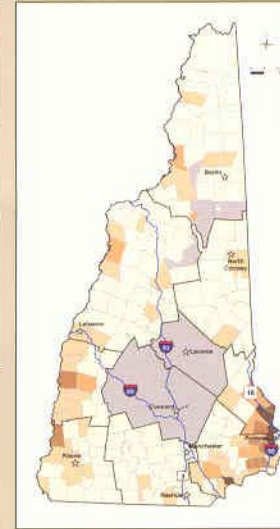- Miles or number of impaired rivers (DEC)
- Water classifications of all major rivers and streams (DEC)
- Acres of permanently protected open space as a percentage of the total
- Acres in active agriculture
- Acres in actively managed forest
- Acres of recreation lands
- Average pH of precipitation
- Number of "good" air quality days
- Abundance and diversity of fisheries
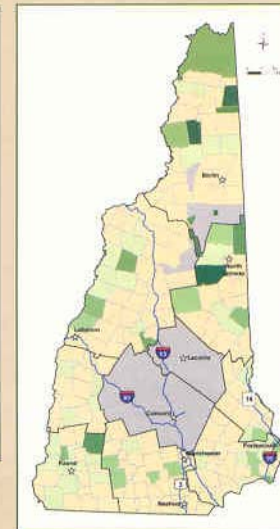- Lbs. of waste recycled per capita

# CROPLAND CHANGE, 1997–2002

County Boundaries
Major Highways
Surface Water

**Cropland Change (acres)**
- < -3,500 (loss)
- -3,500 - -2,500 (loss)
- -2,500 - -1,000 (loss)
- -1,000 - -0 (loss)
- 0 - 250 (gain)

Berlin

North Conway

Lebanon

93 Laconia

89

16

Concord

Keene

Manchester

Portsmouth

95

3

Nashua
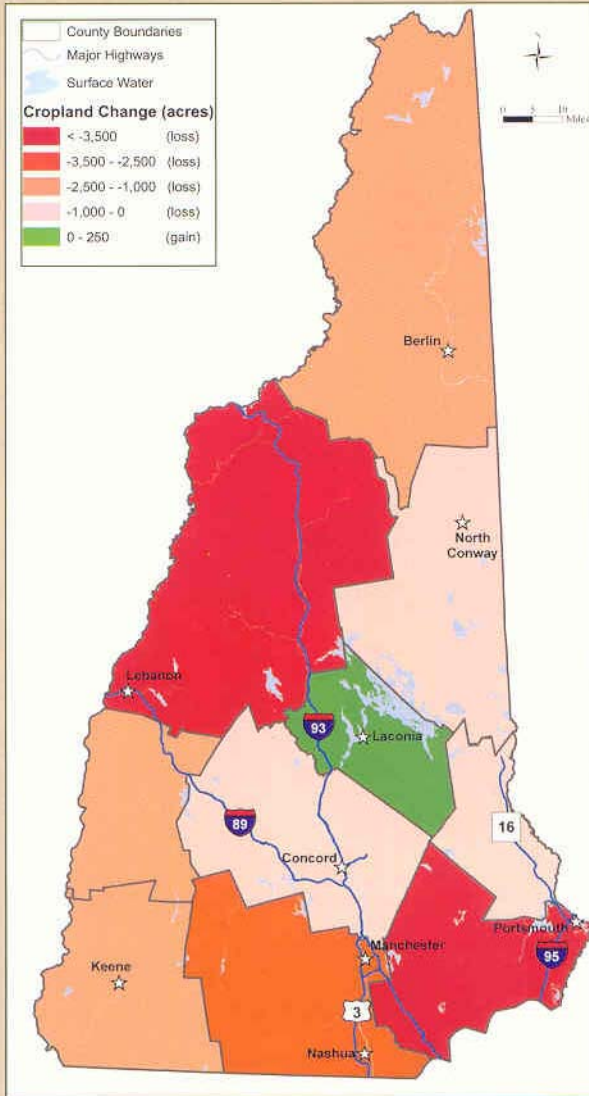
# IMPORTANT AGRICULTURAL SOILS

Municipal Boundaries
County Boundaries
Major Highways
Surface Water
No Data (Merrimack / Belknap Counties and WMNF)

**Prime Agricultural Soils: % of Land Area**
- 0 - 5%
- 5 - 10%
- 10 - 15%
- 15 - 20%
- 20 - 25%
- 25 - 35%

# PROTECTION STATUS

Municipal Boundaries
County Boundaries
Major Highways
Surface Water
No Data (Merrimack / Belknap Counties and WMNF)

**Prime Agricultural Soils: % Protected**
- 0 - 10%
- 10 - 20%
- 20 - 30%
- 30 - 40%
- 40 - 50%
- 50 - 60%
- 60 - 70%
- 70 - 80%
- 80 - 90%
- 90 - 100%

- Farm and cropland statistics provided by the National Agricultural Statistics Service, *2002 Census of Agriculture, N.H. State and County Data, Vol 1, Part 29*.
- Soils statistics generated from National Resource Conservation Service county soils map data (provided by GRANIT).

# Social Vitality
Indicator Examples

- Percent of registered voters who cast votes in local elections
- Number and health of community foundation(s)
- Percent of towns with public libraries
- Number, attendance at fairs, festivals, community events

# Health and Safety
## Indicator Examples



- Number of preventable deaths
- Rate of Property & Violent Crime
- Average emergency response times
- Number of general hospitals and/or specialty clinics within a certain radius of a community

# Education
## Indicator Examples

- Number of high school diplomas granted
- Enrollment in high school vocational courses
- High school seniors planning to pursue further education
- Preprimary school enrollment
- Age/condition of school buildings
- Number of continuing education offerings within a certain radius

# Indicator Models

- Northern Forest Wealth Index

- Society for the Protection of New Hampshire Forest's Changing Landscape Project

- Cape Cod Sustainability Indicators

- Sustainable Measures

- Great Lakes Regional Collaboration

- Chesapeake Bay, Susquehanna River, Delaware River watersheds

- Many, many others!

# Putting Indicators to Use

■ Basic measures that <u>could</u> be used to monitor community/regional trends:

<u>Economic Infrastructure</u>
- Employment by occupation (diversity of economy, strength of sectors)
- Residents employed within town boundary (local $ activity)
- Municipal expenditure categories (essential services met)

<u>Built Infrastructure</u>
- Number of households
- Available amount & types of housing

<u>Land Use</u>
* Net change in number of tax parcels (subdivision activity)
* Tax parcels by property class (shifts in tax burdens)

<u>Green Infrastructure</u>
- Miles of fishable and swimmable rivers and streams
- Land cover (shifts in land use & vegetative diversity)

<u>Social Vitality</u>
* Age distribution of population
* Types of households

# Putting Indicators to Use

## ■ Local Outreach & Feedback

*COGs, Town boards, planning boards –*

- Review what we can provide and let us know if it is something you feel you would make use of

- Tell us if you wish the Commission to devote its resources, and seek additional resources for, this activity

- Tell us if there are indicator areas you would like us to add or revise

*Regional polling  -*

*assess community priorities on quality of life issues, i.e. what indicators are important to monitor according to constituents' view of their community?*

- Town officials, COG representatives, general citizenry (random sample)

# Putting Indicators to Use

- Illustration of trends
  - Comprehensive plans
  - Web-based GIS service for communities

- Ongoing work with communities on use of trend information and goal-setting

# *Thank you!*



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