Core Metrics Methodologies for Regional Comprehensive Plans

Granite State Future's Technical Advisory Subcommittees (TASCs), made up of transportation, housing, water, economic development, natural resources and other infrastructure professionals, used the NH Livability Principles as a framework to discuss and compile the many resources in NH; policies, recommendations, and questions that regional plans should consider; existing conditions and trends; and a variety of metrics for measuring progress. The resources and policies identified have been compiled in an effort to streamline the research process and can be found online in the Regional Plan Framework. The full compilation of the TASCs research may be found in the Regional Plan Framework Appendices. The many existing conditions and trends identified by the TASCs have been integrated into a separate Statewide Existing Conditions and Trends Assessment.

The following lists and details the data computation methodologies for various metrics of common benefit to local, regional and state master plans based upon the initial research of the TASCs. By establishing both a common set of core metrics and methodologies, data can be compared across plans, regions, and neighboring communities. New Hampshire's Regional Planning Commissions in conjunction with UNH Earth System Research Center will be compiling the raw data for each of the following metrics and making all data available online, some of which will be incorporated into the NH GRANIT System at UNH, the State's GIS Clearinghouse.

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Variable: **Population-historic** [ID# 101]

Description: Total 2000 and 2010 Population

Source_Name: U.S. Census, Population of NH Towns and Counties, 1960-2010
Source_Date: 2011
Source_URL: http://www.nh.gov/oep/programs/DataCenter/2010Census/documents/NH-POP-60-10.xls

Geography: Municipality, Aggregated to RPC

Methodology:

Totals and Growth
Present data by municipality, aggregated by RPC:

1) Download Excel file, add columns and enter county and RPC for each municipality.
2) Add column for 2000-2010 Annualized Growth Rate and compute for each municipality as follows:

$$R = (((P_{2010}/ P_{2000})^{(1/n)})-1)*100$$

Where:
r = annualized growth rate
P_{2000} is the 2000 total population
P_{2010} is the 2010 total population
n = number of years elapsed, here n=10

3) Sort by RPC and calculate the total population for each RPC for each year (1960-2010), the total numeric change 2000-2010 for the region (= $P_{2010} - P_{2000}$), regional Percent Change (=$((P_{2010}-P_{2000})/P_{2000})*100$) and Annualized Growth Rate (see above for formula).
4) Suggested to create line charts of each region's historic total population 1960-2010 for presentation in regional plans.

Additional Fields to be included in the table:

- Municipal FIPS code
- County Name
- County FIPS code
- RPC Name
- RPC Code #

Documentation Author: J. Czysz, NRPC; C. Tufts, CNHRPC

Variable: Population by age [ID# 102]

Description:

Total Age Distribution, percent change and growth rate by 5 year age cohorts (varying increments)as shown in Census 2010 SF1 P12 data, and Census 2000 SF1 P12 data.
School Age Population and Change in School age population are extracted/ calculated from the 2010 table and the 2000 table.

Senior population is extracted from 2010 table, and percent is calculated using 2010 total population.

Source_Name: 2010 US Census Bureau, SF1 100% data, table P12
Source_Date: 2010
Source_URL: http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

Source_Name: 2000 US Census Bureau, SF1 100% data, table P012
Source_Date: 2000
Source_URL: http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

Geography: Municipality, Aggregated to RPC

Methodology:

Total Age Distribution, percent change and growth rate by 5 year age cohorts: Download municipal data from the 2000 and 2010 census (save raw data for municipalities). Aggregate the data to derive the total regional population by age cohort for 2000 and 2010.

Additional Fields to be included in the table:

- Municipal FIPS code
- County Name
- County FIPS code
- RPC Name
- RPC Code #

Then, using the 2000 and 2010 total population by cohorts, calculate the numerical and percent change for the decade and the annualized growth rate as follows. Some cohorts will need to be combined to arrive at the 5-year increments:

RPC Summary Table	2000			2010			2000 to 2010 – Change in Total Population	
	Male	Female	Total	Male	Female	Total	# Change	% Change
Total Population:	X	Y	Z =X+Y	A	B	C=A+B	M =C-Z	=M/Z
Under 5 years								
5 to 9 years								
10 to 14 years								
15 to 17 years								
18 & 19 years								
20 years								
21 years								
22 to 24 years								
25 to 29 years								
30 to 34 years								
35 to 39 years								
40 to 44 years								
45 to 49 years								
50 to 54 years								
55 to 59 years								
60 & 61 years								
62 to 64 years								
65 & 66 years								
67 to 69 years								
70 to 74 years								
75 to 79 years								
80 to 84 years								
85 years and over								

Raw Data is separated by RPC on separate sheets, as Excel cannot accommodate enough columns for all municipalities to fit on one sheet. RPC Summary Tables and State Summary Table are on separate sheets.

School Age Population and Percent Change in School Age Population: Total School age population (ages 5-17) as reported by 2010 SF1 P12 data. Percentage created by subtracting 2000 population from 2010 population and dividing by the 2000 population. Must aggregate age groups 5 to 9, 10-14, and 15-17 for both male and female. This data is added to the bottom of the Population by Age table.

Senior Population and Percent Population over 65 Years Old: Population 65 and over as reported in Age Distribution table, 2010 Census SF1 table P12. Need to aggregate several age categories 65 and over, and also male and female. To calculate percent divide by total population. Total population is also available via 2010 Census SF1 table P1. This data is added to the bottom the Population by Age table.

Documentation Author: J. Czysz, NRPC; C. Tufts, CNHRPC

Variable: **Fertility** [ID# 103]

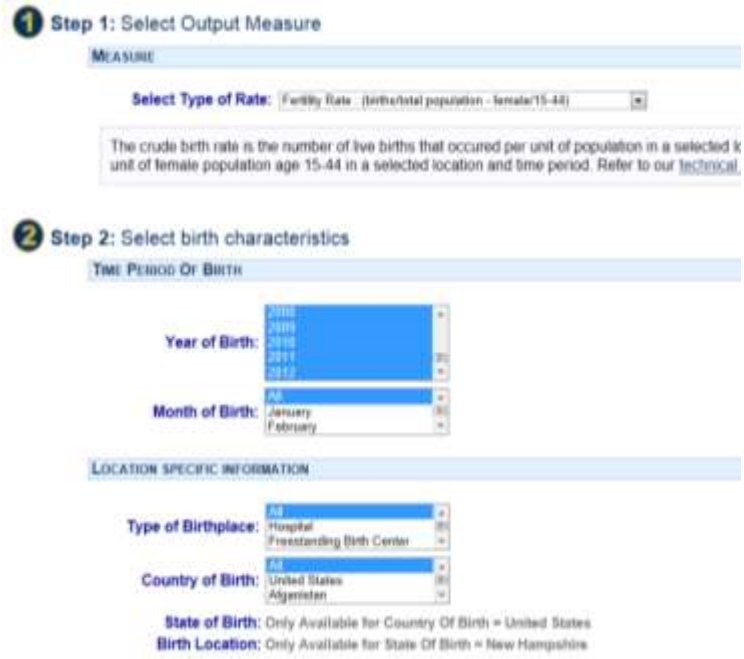
Description: Number of annual births per 1000 women of reproductive age (15-44)

Source_Name: NH Department of Health and Human Services, NH Vital Records
Source_Date: 2003-2007
Source_URL: http://nhvrinweb.sos.nh.gov/Default.aspx

Geography: Municipality

Methodology:

1. Go to the Division of Vital Records Administration website: http://nhvrinweb.sos.nh.gov/Default.aspx. Users must first register to use the database, log in and accept the privacy policy before accessing data. A link to the registration page can be found at the bottom of the menu of options on the left.
2. Select data source from menu of options on left: Birth → Birth Rate
3. Then chose the following:



4. Export table into a csv comma delimited file, and import into Excel
5. Add a new column to compute the average over the 5 years

	2003	2004	2005	2006	2007	03-07
Mother Residence City	A Births Per 1,000	B Births Per 1,000	C Births Per 1,000	D Births Per 1,000	E Births Per 1,000	((A-E)/5) Average Births

6. Additional Fields to be included in the table not shown above:
   - Municipal FIPS code
   - County Name
   - County FIPS code
   - RPC Name
   - RPC Code #

Documentation Author: C. Tufts, CNHRPC; M. Monahan, CNHRPC

Variable: School Enrollment [ID# 104]

Description: Total school enrollment by district by year and by school level, 2002/03 academic year through the 2011-2012 academic year. Also change in enrolment over 10 year period.

Source_Name: NH Department of Education, Enrollments in New Hampshire Public Schools
Source_Date: April 1, 2002-February 8, 2012
Source_URL: http://www.education.nh.gov/data/attendance.htm

Geography: NH School Districts and School Administrative Units

Methodology:

Tables of school enrollment by district are available for download in Excel or PDF format at the NH Department of Education website. Enrollment is available by year for the past 10 years and by age group. To download data, please follow:

1. Go to http://www.education.nh.gov/data/attendance.htm and look for the table titled "School Administrative Unit Enrollments". Download spreadsheets from 2002/03 academic year through the 2011-2012 academic years. Spreadsheets can be downloaded as Microsoft Excel Worksheets.

2. Combine spreadsheets as shown in the sample table. For simplicity, the sample only shows the 2010-2011 and 2011-2012 academic years. Note that there are districts in SAUs 14, 21, 27, 35, 38, 43, 51, 63 that are added or removed, and new SAUs are created over the reporting period. Also, additions and changes to charter schools are frequent.

3. Add columns for Numeric Change and Percent Change to the 2011-20012 academic year columns only, as shown in the sample.

RPC and FIPS codes are not included because SAU and district coverage areas do not necessarily align with municipal boundaries. A map of SAU boundaries can be found here: http://www.education.nh.gov/data/documents/sau_map.pdf

SAU/ District	2011						2012														
	Preschool	Kindergarten	Elementary	Middle	High	Total	Preschool	Numeric Change from 2003	% Change from 2003	Kindergarten	Numeric Change from 2003	% Change from 2003	Elementary	Numeric Change from 2003	% Change from 2003	Middle	Numeric Change from 2003	% Change from 2003	High	Numeric Change from 2003	% Change from 2003	2012 Totals	Total Num. Change 03 to12	% Change 2003 to 2012
District																							
Total SAU #	Σ	Σ	Σ	Σ	Σ	Σ	Σ			Σ			Σ			Σ			Σ			Σ		
District								P_{2012}-P_{2003}	$((P_{2012}-P_{2003})/P_{2003})*100$		K_{2012}-K_{2003}	$((K_{2012}-K_{2003})/K_{2003})*100$		E_{2012}-E_{2003}	$((E_{2012}-E_{2003})/E_{2003})*100$		M_{2012}-M_{2003}	$((M_{2012}-((M_{2003})/M_{2003})*100$		H_{2012}-H_{2003}	$(H_{2012}-((H_{2003})/H_{2003})*100$		T_{2012}-T_{2003}	$((T_{2012}-T_{2001})/T_{2003})*100$

Documentation Author: C. Tufts CNHRPC; M. Monahan CNHRPC

Variable: Race [ID# 105]

Description: Percent total population by Race

Source_Name: 2010 U.S. Census, via NH Office of Energy and Planning
Source_Date: 2010
Source_URL:
http://www.nh.gov/oep/programs/DataCenter/2010Census/documents/race_MCD-2010.xls

Geography: Municipality

Methodology:

Totals and percent of total. All data is already tabulated by municipality, need to add RPC field to Excel file, resort, and aggregate by region. Data would be more meaningful to display as percent of total population.

Fields to be included in the table:

- Municipal FIPS code
- County Name
- County FIPS code
- RPC Name
- RPC Code #
- Total Population
- White - Total and Percent of Total Population
- Black or African American - Total and Percent of Total Population
- American Indian and Alaska Native - Total and Percent of Total Population
- Asian Native Hawaiian and Other Pacific Islander - Total and Percent of Total Population
- Some Other Race - Total and Percent of Total Population
- Two or More Races - Total and Percent of Total Population
- Hispanic or Latino (of any race) - Total and Percent of Total Population

Documentation Author: J. Czysz, NRPC

Variable: **Net Migration** [ID# 106]

Description: Net # of persons moving into or out of each municipality and region.

Source_Name: 2010 U.S. Census, SF1 100 % Data, Table P1
Source_Date: 2010
Source_URL:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/P1/0400000US33.06000

Source_Name: 2000 U.S. Census, SF1 100 % Data, Table P001
Source_Date: 2000
Source_URL:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/00_SF1/P001/0400000US33.06000

Source_Name: Births – Total # by municipality 2000-2009
Source_Date: 2012
Source_URL: http://nhvrinweb.sos.nh.gov/Default.aspx (registration and login required)

Source_Name: Deaths – Total # by municipality 2000-2009
Source_Date: 2012
Source_URL: Data must be special requested from NH DHHS to obtain the total number NH Resident deaths by municipality. The state total annual deaths may be obtained from the same database as births.

Geography: Municipality, Aggregated to RPC

Methodology:

Download 2000 and 2010 total population by municipality

To Download all births from 2000 to 2010, go to the New Hampshire Vital Records Information Network Web Query site, select Births: General: Birth from the list of Queries on the left. Then in the step by step selection process - select Population: NH Residents; year of birth 2000-2009; month of birth: all; type of birthplace: all; Country of Birth: all; Mother Race and Ethnicity: any; Age: all; Education: all; Residence: city/town; residency county: all; Father Race and Ethnicity: any, age all, education all; Select All for Mother Married, Infant Weight and Sex, and Plurality. Grouping Options: Columns by Year of Birth, Rows by Mother Residence City. Then click Results. Export to Excel and Sum the total number of births from 200 to 2009 by municipality.

The 10 year total municipal net migration is calculated as the total 2010 population for the selected geography minus the 2000 population and natural population change, where the natural population change is the total number of births that occurred between the two censuses minus the total number of deaths for the time period. More simply, it is calculated as follows:

Community	A 2000 Population	B 2010 Population	C 2000-2009 Births	D 2000-2009 Deaths	E 2000-2009 Natural Population Change	Total Net Migration
Muni's	#	#	#	#	= C - D	= B – (A+E)
Region						

This process could be repeated using the annual population estimates along with annual birth and death data, however, given that the population between Censuses is only an estimate, the net migration rate would not be reliable for municipalities.

Additional Fields to be included in the table not shown above:

- Municipal FIPS code
- County Name
- County FIPS code
- RPC Name
- RPC Code #

Documentation Author: J. Czysz, NRPC

Variable: **Projected Population** [ID# 107]

Description: Total and growth rate

Source_Name: NH Population Projections, NH OEP (RLS Demographics, Inc.)
Source_Date: Fall 2013
Source_URL: https://www.nh.gov/oep/data-center/population-projections.htm

Geography: NH, Counties and Municipalities

Methodology:
Projections are currently under development and being coordinated by CNHRPC. The final projections will have total populations for the state, counties and municipalities. Projections will be tabulated using the cohort component method at the county level and aggregated to create the state total projection. To generate the municipal projections of total population, the consultant will distribute the county projected growth to municipalities using a yet to be finalized methodology. Likely, this process will begin by distributing to each municipality a share of the total growth based on its share of the county population or historic county population change and adjusting to reflect known conditions that may impact or change that rate of growth. Municipal projections will not be available by age cohort.

Once the projections are complete, the total projected population included in regional plans should be by municipality and aggregated to the RPC total. Totals will be from 2010-2040 and at five year increments. Percent Change (%) is calculated as: $((P_{2040}-P_{2010})/P_{2010})*100$; where P_{2040} is the Total Population in 2040 and P_{2010} is the Total Population in 2010. The 2010 Population is derived from the 100% count 2010 US Census and 2040 Population from the projections. Annualized Growth Rate is r% = (((F/P)^(1/n))-1)*100 Where:

r = annualized growth rate
F= Future or projected total, here F= P_{2040}
P=Present, current population, here P = P_{2010}
n = number of years between F and P, here n=30

Additional Fields to be included in the data not indicated above:

- Municipal FIPS code
- County Name
- County FIPS code
- RPC Name
- RPC Code #

Documentation Author: J. Czysz, NRPC

Variable: Housing Units Supply-historic [ID# 108]

Description: Total and growth rate

Source_Name: 2010 U.S. Census, SF1-100% Data, Table H1
Source_Date: 2010
Source_URL:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/H1/0400000US33.06000

Source_Name: 2000 U.S. Census, SF1-100% Data, Table H001
Source_Date: 2000
Source_URL:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/00_SF1/H001/0400000US33.06000

Geography: Municipality, Aggregated to RPC

Methodology:
Totals and Growth
Present data by town:

Community	Total Dwelling Units		# Change 2000 - 2010	% Change 2000-2010
	2000	2010		
Muni's	H_{2000}	H_{2010}	= H_{2010} - H_{2000}	((H_{2010}-H_{2000})/H_{2000})*100
Region Totals				

H_{2000} is the total number of dwelling units downloaded from the 2000 U.S. Census, SF1-100% Data, Table H001, by municipality and aggregated by RPC.

H_{2010} is the total number of dwelling units downloaded from the 2010 U.S. Census, SF1-100% Data, Table H1, by municipality and aggregated by RPC.

% Change 2000-2010 = ((H_{2010}-H_{2000})/H_{2000})*100

Additional Fields to be included in the table not shown above:

- Municipal FIPS code
- County Name
- County FIPS code
- RPC Name
- RPC Code #

Documentation Author: J. Czysz, NRPC

Variable:Undeveloped Land Protected From Development [ID# 201]

Description: Percent of municipality's land area conserved/protected as undeveloped. Question on title?

Source_Name: GRANIT Conservation and Protected Lands*
Source_Date: November 8, 2012
Source_URL: http://www.granit.unh.edu/data/search?dset=consnh

Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 14, 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

Source_Name: New Hampshire Hydrography Dataset – NHDArea and NHDWaterbody
Source_Date: January, 2006
Source_URL: http://www.granit.sr.unh.edu/cgi-bin/nhsearch?dset=nhhd/nh

Geography: Municipality

Methodology:

*Note – Regional Planning Commissions may add additional lands not in GRANIT.

In GIS, apply a definition query to NHDWaterbody to select only lakes/ponds and reservoirs greater than 10 acres in size (or 0.0404686 km^2). Perform a clip operation on Political Boundaries using both NHDArea and NHDWaterbody – this will clip out public water areas in each municipality, leaving only the land area. Calculate the acreage of the land area in each municipality. Add a field to the original Political Boundaries and transfer the land area acreage from the clipped file field to the Political Boundaries field.

Perform a clip operation on Conservation and Public Lands using both NHDArea and NHDWaterbody – this will clip out public water areas in the Conservation and Public Lands data, leaving only the land area. Query the conservation lands data set on LEVEL = 1, 2, or 3 to extract features with appropriate protection levels. Intersect the Conserved & Public Lands data and the Political Boundaries shapefile. Calculate the acreage of conservation land using Calculate Geometry in the attribute table. Summarize the area of land conserved by town.

In Excel, calculate percentage of town land area conserved by dividing conserved acres into total town land area and multiplying by 100.

A	B	C	D	E	F
Municipality	FIPS_ID	RPC_ID	Cons. Land Acreage	Town Land Acreage	%Conserved
					= (D/E)*100

Documentation Author: R. Ruppel, UVLSRPC

Variable: Land in Current Use [ID# 202]

Description: NH current use statutes provide property tax incentives for qualifying land owners to wish to preserve open space. Under the abatement program, owners of land currently in use for farming, forest, and wetlands can avoid land assessment based on "best and highest" potential use (i.e. development).

This metric reports total land acreage and percentage total land acreage enrolled in Current Use, by town, for the years 2000, 2010, and 2011. The table also contains, for each time slice, total acreages by municipality in five subcategories: farm land, forest land, forest land with documented stewardship, unproductive and wetland.

Source_Name: Current Use Report

Source_Date: 2000, 2010, 2011 "why these years?"
Source_URL: http://www.revenue.nh.gov/munc_prop/current_use/reports.htm; 2000 data provided in Excel spreadsheet from NH Department of Revenue Administration

Geography: data available at Municipality; report at municipality level.

Methodology:

From the Current Use reports from 2000, 2010 and most recent year (2011), the relevant fields should be compiled into an Excel spreadsheet, as follows:

A	B	C	D	E	F
Municipality	FIPS_ID	RPC_ID	Total Land Acres (2000)	Acres in Current Use (2000)	# of Total Acres in CU (2000)

G	H	I	J	K	L
Farm Land (2000)	Forest Land (2000)	Forest Land with Documented Stewardship (2000)	Unproductive (2000)	Wetland (2000)	<Repeat for 2010, 2011>

Documentation Author: R. Ruppel, UVLSRPC

Variable: Change in Land Cover, 2001-2006 [ID# 203]

Description: Change in Land Cover, 2001-2006 by land cover category, acreage summarized by municipality.

Source_Name: National Land Cover Dataset 2006 get the inputs
Source_Date: 2011
Source_URL: http://www.mrlc.gov/nlcd06_data.php

Source_Name: National Land Cover Database 2001
Source_Date: 2011
Source_URL: http://www.mrlc.gov/nlcd01_data.php

Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 14, 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

Geography: Regional Planning Commission

Methodology:

In GIS, use the Political Boundaries layer to create a new shapefile of RPC boundaries.

Run the below processes for each RPC in NH, once for the 2001 land cover data, and once for the 2006 data. Name the resulting raster datasets to include the year and RPC number, e.g. 01LC1 would be an appropriate title for the 2001 land cover dataset displaying only the area of North Country Council.

To create a land cover change raster for each RPC's region:

1. Add image (NLCD raster) to ArcMap.
2. Zoom into the area of interest (in this case, each RPC).
3. Export area of interest to GRID
   Extent = Data Frame (Current)
   Spatial Reference = Raster Data (Original)
   Rename the file name and select a desired output file format (i.e. GRID)
   Click Save. Ignore the "Failed to Save Raster Dataset" message. Click OK.
4. In ArcCatalog, go to ArcToolbox, Data Management Tools, Raster, Raster Properties, Build Raster Attribute Table.
   Input grid file
   Check "Overwrite"
   Run
5. In ArcCatalog, go to ArcToolbox, Data Management Tools, Joins, Join Field.
   Input dataset = grid file
   Input join field = value
   Join table = (Source NLCD image)
   Output join field = value

Join fields
Check – Red, Green, Blue, Opacity, Land cover
Run

When Steps 1-5 have been completed for the 2001 and 2006 National Land Cover Datasets, there will be 18 raster files, two for each RPC.

Open Map Algebra→ Raster Calculator, and use the formula:

- (01LC*100)+ 06LC.
- 01LC represents the 2001 NLCD for a specific RPC.
- 06LC represents the 2006 NLCD for that same RPC.
- The resulting dataset should include four digit values, where the first two digits are the NLCD value in 2001 and the second two digits are equal to the NLCD value in 2006.

Extract each 0106change raster data set by mask using the appropriate RPC.

Project resulting raster files to NAD_1983_StatePlane_New_Hampshire_FIPS_2800_Feet

To calculate the change in acreage, use formula (COUNT*30^2)* 0.00024711

If generalized land cover change is necessary, reclassify values using Spatial Analyst Tools→Reclass→Reclassify.

Export table for use in Excel. Summarize by series (1_, 2_, 3_, 4_, 7_, 8_, 9_), e.g. forest to developed, agriculture to forest, etc.

A	B	C	D	E
RPC_ID	Change from 1 to 2	Change from 1 to 3	Change from 1 to 4	etc.

For more information on the land cover classifications used by the NLCD, refer to http://www.mrlc.gov/nlcd06_leg.php.

Documentation Author: R. Ruppel, UVLSRPC

Variable: Key Destinations within ½ mile of Community Center Areas

[ID# 204]

Description: Percentage of Key Destinations located within ½ mile of Community Center Areas, summarized by municipality. (Note - ½ mile represents a "walkable" distance, per NHDES recommendation.)

Source_Name: Key Destinations
Source_Date: 2006
Source_URL:
http://www.granit.unh.edu/data/search?sterm3=destinations&fieldname3=themekey

Source_Name: Community Anchor Institutions did she update?
Source_Date: 2012
Source_URL: via GRANIT staff from NH Broadband Mapping and Planning Program

Source_Name: Community Center Areas
Source_Date: 2006
Source_URL:
http://www.granit.unh.edu/data/search?dset=communitycenterareas/nh

Geography: Municipality

Methodology:

In GIS, update Key Destinations shapefile based on 2012 Community Anchor Institutions data for K-12 schools, higher education facilities, municipal offices, libraries, community facilities, athletic/recreation facilities, and hospitals.

In GIS, query by location to select key destinations located within ½-mile of Community Center Areas. Add a text field to the Key Destinations attribute table, name it "In_CCA" and populate selected records with a "Y."

In Excel, open both polygon and point Key Destinations attribute table and combine into one spreadsheet. Calculate % of Key Destinations located within Community Center Areas (i.e. Key Destinations with a "Y" in "IN_CCA" field) for each municipality.

A	B	C	D	E	F
Municipality	FIPS_ID	RPC_ID	% Key Destinations in ½ Mile of CCAs	# Key Destinations in ½ Mile of CCAs	Area (mi^2) of Community Center Areas + ½ Mile

Documentation Author: R. Ruppel, UVLSRPC

Variable: **Population Density** [ID# 205]

Description: Population Density by municipality, persons per square mile why not SF1 and ALAND area

Source_Name: U.S. Census, Population of NH Towns and Counties, 1960-2010
Source_Date: March 31, 2011
Source_URL: http://www.nh.gov/oep/programs/DataCenter/2010Census/index.htm

Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 14, 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

Source_Name: New Hampshire Hydrography Dataset – NHDArea and NHDWaterbody
Source_Date: January, 2006
Source_URL: http://www.granit.sr.unh.edu/cgi-bin/nhsearch?dset=nhhd/nh

Geography: Municipality

Methodology:

In GIS, apply a definition query to NHDWaterbody to select only lakes/ponds and reservoirs. Perform a clip operation on Political Boundaries using both NHDArea and NHDWaterbody – this will clip out water areas in each municipality, leaving only the land area. Calculate the acreage of the land area in each municipality. Add a field to the original Political Boundaries and transfer the land area acreage from the clipped file field to the Political Boundaries field.

In Excel, combine 2010 population counts with municipal land area. Calculate municipal land area in square miles and divide population by area to determine population density.

A	B	C	D	E	F
Municipality	FIPS_ID	RPC_ID	2010 Population	Town Land Area (mi^2)	Population Density
					= D/E

Documentation Author: R. Ruppel, UVLSRPC

Variable: % Population and % Housing Units within ½ Mile of CCA

[ID# 206]

Description: Percentage of Population and Housing Units located within ½ mile of Community Center Areas, summarized by municipality. (Note - ½ mile represents a "walkable" distance, per NHDES recommendation.)

Source_Name: U.S. Census, 2000 Population and Housing Unit by Census Block
Source_Date: 2001 (secondary source)
Source_URL: https://data2.nhgis.org/main

Source_Name: U.S. Census, 2010 Population and Housing Unit by Census Block
Source_Date: 2011
Source_URL: http://www.census.gov/cgi-bin/geo/shapefiles2010/layers.cgi

Source_Name: Community Center Areas
Source_Date: 2006
Source_URL:
http://www.granit.unh.edu/data/search?dset=communitycenterareas/nh

Geography: Regional Planning Commission

To download data from the National Historic GIS Database, use search parameters Geographic Level= block, and Years= 2000, selecting New Hampshire from the *GIS boundary files tab*. Select households and populations from Topics, and add the Total Population and Total Households datasets from *the source tables tab* to data cart. Downloaded tables can be joined to the GIS block boundaries in ArcGIS.

In GIS, calculate area of each census block, then perform a Clip operation on census blocks located within ½-mile of Community Center Areas. Add a new field and calculate the census block area inside the CCA+1/2-mile, then calculate the percentage of the census block inside the CCA+1/2-mile as a decimal. (If less than 10% of the census block is located within the CCA+1/2-mile, remove it from the analysis.)

Add two new fields and calculate an estimate of the population and housing units within the CCA+1/2-mile portion of each census block by multiplying total population and housing units by the percentage of the census block inside the CCA+1/2-mile.

In Excel, report out on the data as shown below.

A	B	C	D	E	F
RPC_ID	RPC_Name	2000 Population Total	2000 Population in CCA+1/2-mile	% 2000 Population in CCA+1/2-mile	Repeat for 2010 population and 2000/2010 housing units

Documentation Author: R. Ruppel, UVLSRPC

Variable: Hazard dams [ID# 207]

Description: Number of high-hazard and significant-hazard dams in each municipality.

Source_Name: New Hampshire DES Dam Bureau
Source_Date: 2012
Source_URL: provided by Nancy McGrath, NHDES Dam Bureau

Geography: Municipality

Methodology:

In GIS, query the NH dams data set on HAZCL = H to extract features with high hazard classification. Then query the NH dams data set on HAZCL = S to extract features with significant hazard classification.
OR
In Excel, filter the NH dams data set on HAZCL = H to extract features with high hazard classification. Then filter the NH dams data set on HAZCL = S to extract features with significant hazard classification.

Calculate number of high-hazard and significant-hazard dams within each municipality.

A	B	C	D	E
Municipality	FIPS_ID	RPC_ID	# of High-Hazard Dams in Municipality	# of Significant-Hazard Dams in Municipality

Also, list the ID number and name of high-hazard dams in each municipality.

A	B	C	D	E
Municipality	FIPS_ID	RPC_ID	Dam ID #	Dam Name

Also, list the ID number and name of significant-hazard dams in each municipality.

A	B	C	D	E
Municipality	FIPS_ID	RPC_ID	Dam ID #	Dam Name

This metric may be most useful as a map graphic, showing the location of high-hazard and significant-hazard dams – NHDES will recommend a sample map product with appropriate language.

Documentation Author: R. Ruppel, UVLSRPC

Variable: Median Home Purchase Price [ID# 301]

Description: Median purchase price of a home by Region in 2012. Information provided by the N.H. Department of Revenue, PA-34 Dataset.

Source_Name: Median Home Purchase Price
Source_Date: 2012
Source_URL: http://www.nhhfa.org/rl_demographic.cfm

Geography: Region, Municipality optional if data is available. (Note: samples sizes of less than 50 are considered unreliable).

Methodology:

1. Go to the website: http://www.nhhfa.org/rl_demographic.cfm and select the "Housing Data" link. Select "Purchase Price Data" from the top row of tabs and then select "Purchase Price Data: Median Purchase Price" on the left hand side of the webpage. Select your geography using the drop down menus and select RPC for the region in interest. NOTE: As an optional metric, you may select by town if the information is available.
2. In the first table, you will find Median Purchase Price (shown below). Download the table in either Excel format or PDF format by right clicking the spreadsheet. Collect data from the "All Homes" category for the year 2012.
3. Create an Excel table for each region's Median Home Price for 2012 as shown in the Example below.

Example:

		All Homes	
RPC Name	RPC Code	Median Purchase Price	Sample Size
NCC	1	$ 130,000	633

NOTE: This data set provides an estimate of the median sale price of existing and new primary homes in New Hampshire. A primary home is defined as a single family home occupied by an owner household as their primary place of residence. Multi-family rental housing, seasonal or vacation homes and manufactured housing are not included in the analysis of this data. (New Hampshire Housing)

Documentation Author: S. Waleryszak, SWRPC

Variable: Median Rental Cost [ID# 302]

Description: Median gross rent by Region. Information is provided by the N.H. Department of Revenue, PA-34 Dataset.

Source_Name: Median Gross Rental Cost
Source_Date: 2012
Source_URL: http://www.nhhfa.org/rl_demographic.cfm

Geography: Region, Municipality optional if data is available. (Note: samples sizes of less than 50 are considered unreliable).

Methodology:

1. Go to the website: http://www.nhhfa.org/rl_demographic.cfm and select the "Housing Data" link. Select "Rental Price Data" from the top row of tabs and then select "Rental Cost Data: Median Gross Rent" on the left hand side of the webpage. Select your geography using the drop down menus and select RPC for the region in interest. NOTE: As an optional metric, you may select by town if the information is available, however it is advised to avoid using data with sample sizes of 50 or smaller.
2. Download the "Median Rent" table by right clicking the spreadsheet. Collect 2012 data from the "All Units" Category for each Region.
3. Create an Excel table with the information shown in the Example below:

EXAMPLE

		All Units	
RPC Name	RPC CODE	Median Gross Rental Cost	Sample Size
NCC	1	$ 716	784

NOTE: This data does not reflect the change in the Town of Windham's RPC affiliation from Rockingham Planning Commission to Southern NH Planning Commission. The 2013 data will reflect this change, however.

This data set provides a median gross rental cost for rental housing in the state of New Hampshire, broken down into Regional Planning Commission (RPC) boundaries. Gross rental cost is the rent charged by the landlord plus dollar allowances for each utility paid by the tenant. Units in public housing, units with tenant income restrictions and/or rent restrictions, and units in projects that received public funding or tax credits are not included in this survey. (New Hampshire Housing)

Documentation Author: S. Waleryszak, SWRPC

Variable: **Housing Affordability**[ID# 303]

Description: Percentage of Renter Units and Owner Units affordable to households earning 80 percent of the Housing and Urban Development Area Median Family Income (HAMFI).

Source_Name: Percentage of Renter and Owner-Occupied Housing Units Affordable to Households Earning 80% of the HAMFI.
Source_Date: 2005-2009 American Community Survey (ACS) data
Source_URL: http://egis.hud.gov/cpdmaps/

Source_Name: Number of occupied housing units by tenure and household size
Source_Date: 2005-2009 American Community Survey (ACS) data
Source_URL: http://egis.hud.gov/cpdmaps/

Geography: Region wide by selecting each Municipality in the Regional Planning Commission boundaries.

Methodology:

1. Go to http://egis.hud.gov/cpdmaps/
2. Close the "Guide Me" window that pops up on the screen.
3. Use the map tools to zoom to your region.
4. Chose the "Map Selection Button" (you may have to expand it from the top left corner). Next, navigate to Boundaries then Grantee Boundaries and check "CoC and "UGLG" to view the boundaries of the towns and cities.
5. Click on the Reports icon on the toolbar on the top of the screen.
6. In the Target Jurisdiction drop-down menu, select Municipalities as your geography:
7. Use the drawing controls in the window to select the municipalities in your region.
8. Click the Next button in the lower-right corner of the Reports window.
9. On the next screen, you will be prompted to choose an optional set of reference data to include in the report. "None (default)" should be selected; ensure that it is and then click the Next button.
10. On the next screen, you will be prompted to choose the data that you want to include in the report. Click the Uncheck All button, and then click the check boxes next to Housing Supply, then click the Next Button.
11. On the next screen, you can enter a customized title for the report if you wish, and then click the Finish button in the lower right-hand corner of the Reports window. Your browser will download an Excel file of the report. (Note: if the download does not begin, you may need to turn of the pop-up blocker on your website.
12. Open the Excel file and locate the table showing the number of Owners and Renters that fall within the category of 80% HAMFI.
13. Locate the table: Total Number of occupied housing units by tenure and household size for Owner and Renter.

Calculations

1. Divide the total number of rental housing units affordable to households earning 80% of the HAMFI by the total number of rental households to calculate the percentage.
2. Divide the number of owner-occupied housing units affordable to households earning 80% of the HAMFI by the total number of owner-occupied housing units to calculate the percentage.

EXAMPLE:
Southwest Region Planning Commission

- Percentage of Owner-Occupied Housing Units affordable to household earning 80% of the HAMFI: 4,552/29,495 x 100 = 15.4%

- Percentage of Renter-Occupied Housing Units affordable to households earning 80% of the HAMFI: 4,887/9,350 x 100 = 52.3%

	SWRPC	4
Total Owner-Occupied Housing Units	**29,495**	
Total Renter-Occupied Housing Units	**9,350**	
Owner-Occupied Units Affordable to 80% OF HAMFI	**4,552**	
Renter-Occupied Units Affordable to 80% of HAMFI	**4,887**	
Percent of Owner-Occupied Housing Units Affordable to Households Earning 80% of HAMFI	**15.4%**	
Percent of Renter-Occupied Housing Units Affordable to Households Earning 80% of HAMFI	**52.3%**	

Documentation Author: S. Waleryszak, SWRPC

Variable: Number of Assisted Housing Units[ID# 304]

Description: Number of "assisted housing" units in a particular geographic area. Data provided by the New Hampshire Housing Finance Authority.

Source_Name: Total Number of Assisted Housing Units
Source_Date: December 4, 2012
Source_URL: http://www.nhhfa.org/rent_dah.cfm

Geography: Municipality

Methodology:

1. Go to http://www.nhhfa.org/rent_dah.cfm and download the "Printable Directory of Assisted Housing (with Accessible Unit Listing)" Microsoft Word document.
2. Convert this Microsoft Word document into a spreadsheet using Microsoft Excel so that the fields are separated into columns. (Complete Excel file can be obtained by calling NH Housing).
3. Geocode the Housing Units based on the address data in the Excel table using GIS.
4. Using GIS, calculate the total number of Assisted Housing units per town.

NOTE: This does not include "Section 8" housing vouchers, as this information is not available.

Example: Allenstown, NH

Town Name	Town FIPS	County Name	County FIPS	RPC Name	RPC Code	Total Assisted Housing Units
Allenstown	00660	Merrimack	013	CNHRPC	5	105

Documentation Author: S. Waleryszak, SWRPC

Variable: Housing Unit Vacancy Rates[ID# 305]

Description: Percentage of non-seasonal vacant housing units out of the total number of housing units in a municipality.

Source_Name: Vacancy Status: U.S. Census Bureau 2010 Census Summary File 1, Table QT-H1.
Source_Date: April 1, 2010
Source_URL:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/QTH1/0400000US33.06000.

Geography: Municipality

Methodology:

1. Copy and paste the link below into your browser:
   http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/QTH1/0400000US33.06000.
2. "Vacancy Status" is the third heading from the top.
3. Calculate the percent vacant by following the Example below.

EXAMPLE
Alton, NH

Total Vacant Housing Units: 2,136
Vacant Housing Units for Seasonal, Recreational, or Occasional Use: 1,928
Total Housing Units: 4,281

Total non-seasonal housing units: 4,281-1,928 = 2,353

2,136-1,928 = 208 *Real* Vacant housing units (not seasonal)
208 / *2,353* = 0.088
.088 x 100 = 8.8 % *Real* Vacancy Rate (adjusted for vacancy status due to seasonal use)

Final table will include the following fields:

- RPC Name
- RPC Code
- County Name
- County FIPS
- Municipality Name
- Town FIPS

Documentation Author: S. Waleryszak, SWRPC

Variable: Housing Occupancy – Percent Year Round Owner-Occupied Housing Units [ID# 306]

Description: The percent of year round owner occupied housing units out of the total of occupied housing units in a given geographic area.

Source_Name: Owner Occupied Housing Units: US Census Bureau 2010 Census Summary File 1, Table QT-H3.
Source_Date: April 1, 2010
Source_URL:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/QTH3/0400000US33.06000.
Geography: Municipality

Methodology:

Copy and paste the link below into your browser:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/QTH3/0400000US33.06000.
"Owner-occupied housing units" is the third line down where you will find the whole number and the percent of the total number of occupied housing units in that particular geographic area.

Documentation Author: S. Waleryszak, SWRPC

Variable: Housing Occupancy - Percent Renter-Occupied Housing Units [ID# 307]

Source_Name: Renter Occupied Housing Units: US Census Bureau 2010 Census Summary File 1, Table QT-H3.
Source_Date: April 1, 2010
Source_URL:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/QTH3/0400000US33.06000.

Methodology
Copy and paste the link below into your browser:
http://factfinder2.census.gov/bkmk/table/1.0/en/DEC/10_SF1/QTH3/0400000US33.06000.
Renter-occupied housing units" is the sixth line down where you will find the whole number and the percent of the total number of occupied housing units in that particular geographic area. Download data for each Municipality.

Final table will include the following fields:

- RPC Name
- RPC Code
- Municipality Name
- Town FIPS
- County Name
- County FIPS
- Number of Owner Occupied Housing Units
- Percent Owner of Total Housing Units
- Number of Renter Occupied Housing Units
- Percent Rental of Total Housing Units

Documentation Author: S. Waleryszak, SWRPC

Variable: Total Number and Percent Change in Building Permits [ID# 308]

Description: The total estimated number and percent change in building permits issued for a particular municipality. Data provided by NH Office of Energy and Planning (OEP).

Source_Name: Residential Permits; Housing Units Authorized by Permit
Source_Date: 2010
Source_URL:http://www.nh.gov/oep/programs/DataCenter/Housing/documents/2009housingreport.pdf

Source_Name: Building Permits Since 2000
Source_Date: 2010
Source_URL: http://www.nhhfa.org/rl_5year.cfm

Geography: Municipality

Methodology:

1. Go to the website:
2. http://www.nh.gov/oep/programs/DataCenter/Housing/documents/2009housingreport.pdf and http://www.nhhfa.org/rl_5year.cfm to view Building Permit data for 2000 – 2010. You can request a customized Excel sheet from NH Housing or Office of Energy and Planning for all of the municipalities in the state of New Hampshire.
3. Determine Annual Total and # of permits for first and second half of the decades (2000-2005; 2006-2010).
4. Use the following mathematical formula to determine percent change between the 2000-2005 period. and the 2005 -2010 period.

$$\text{Percent Change} = \frac{\text{New Value - Old Value}}{\text{Old Value}} \times 100$$

5. Present data by Municipality

Example Table:

Town Name	Town FIPS	County Name	County FIPS	RPC Name	RPC Code	2010
Acworth	00260	Sullivan	019	UVLSRPC	3	6

Town Name	Town FIPS	County Name	County FIPS	RPC Name	RPC Code	2000-2005	2005-2010	PERCENT CHANGE
Acworth	00260	Sullivan	019	UVLSRPC	3	46	34	**-26.1%**

Documentation Author: S. Waleryszak, SWRPC

Variable: Percent Change in Median Home Price [ID# 309]

Description: The percent change in Median Home Prices between 2005 and 2012.

Source_Name: Median Home Purchase Price
Source_Date: April 2012
Source_URL: http://www.nhhfa.org/rl_demographic.cfm

Geography: Region, Municipality optional if data is available. (Note: samples sizes of less than 50 are considered unreliable).

Methodology:

1. Go to the website: http://www.nhhfa.org/rl_demographic.cfm and select the "Housing Data" link. Select "Purchase Price Data" from the top row of tabs and then select "Purchase Price Data: Median Purchase Price" on the left hand side of the webpage. Select your geography using the drop down menus and select RPC for the region in interest. NOTE: As an optional metric, you may select by town if the information is available, however it is advised to avoid using data with sample sizes of 50 or smaller.
2. In the first table, you will find Median Purchase Price (shown below). Download the table in either Excel format or PDF format by right clicking the spreadsheet. Collect data from the "All Homes" category for the year 2012.
3. Calculate the percent change from 2005 – 2012. The reason for these two periods is 2005 was before the peak of the "housing bubble" and 2012 is the most current data.

EXAMPLE
Central Region Planning Commission
2012 = $179,900 (New Value)
2005 = $232,000 (Old Number)

$$\text{Percent Change} = \frac{\text{New Value - Old Value}}{\text{Old Value}} \times 100$$

Percent Change = ((179,900-232,000)/232,000) x 100 = 22.5% Decrease in Median Home Price between 2005 and 2012.

RPC Name	RPC Code	2005*	2012	Percent Change
CNHRPC	5	$ 232,000	$ 179,900	-22.5%

*NOTE: This data may not reflect historical changes in town affiliations with Regional Planning Commissions. This data set provides an estimate of the median sale price of existing and new primary homes in New Hampshire. A primary home is defined as a single family home occupied by an owner household as their primary place of residence. Multi-family rental housing, seasonal or vacation homes and manufactured housing are not included in the analysis of this data. (New Hampshire Housing)

Documentation Author: S. Waleryszak, SWRPC

Variable: Number of Assisted Housing Units Near Major Employers [ID# 310]

Description: The number of assisted housing units near Major Employer Centers according to The U.S. Census Bureau's Local Employment Dynamics (LED) On The Map program. NOTE: Additional effort on the part of the RPC will be required to determine exactly what "Near Major Employers" means to your region based on the information provided. You will find additional instructions in the "ReadMe.txt" file in the RPC folders that will be uploaded as part of the data submission.

Source_Name: Assisted Housing; Provided by the New Hampshire Housing Finance Authority
Source_Date: December 4, 2012
Source_URL: http://www.nhhfa.org/rent_dah.cfm

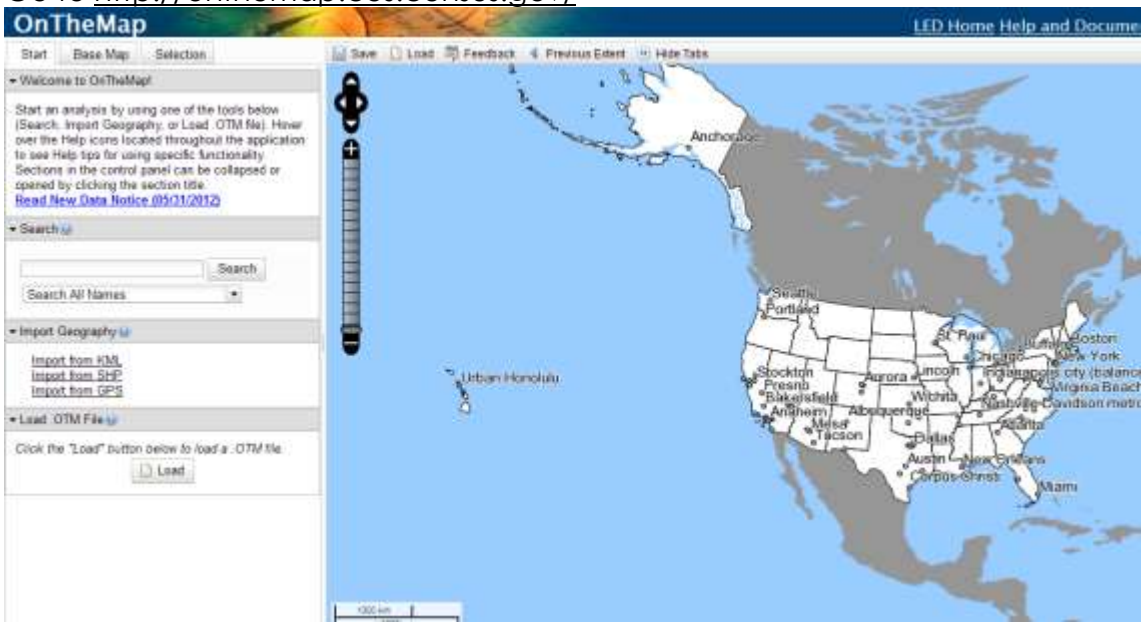
Geography: Municipality

Source_Name: On The Map; U.S. Census Bureau
Source_Date: 2012
Source_URL: http://onthemap.ces.census.gov/

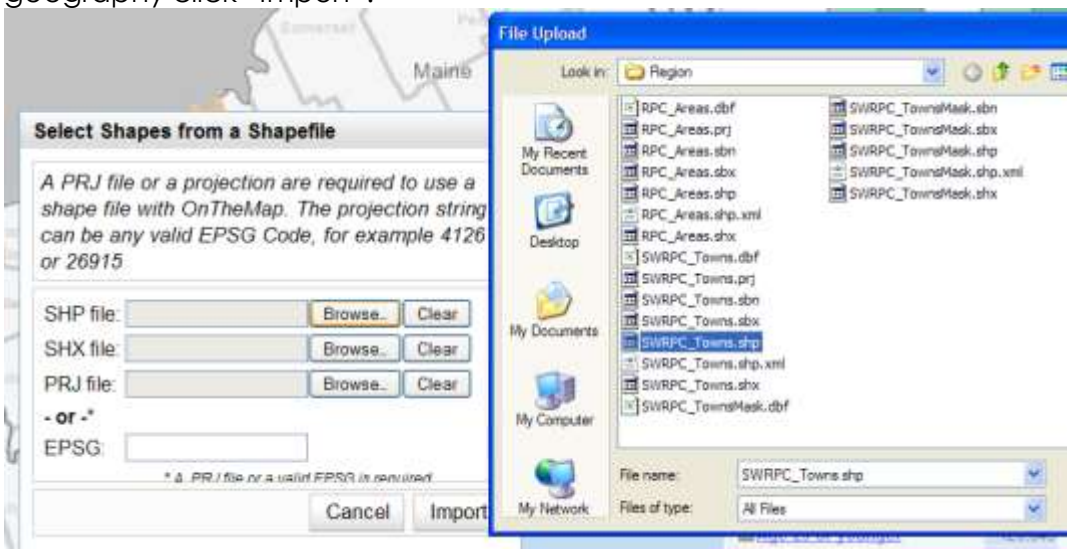
Geography: Region, you can choose municipality as an optional method.

Methodology:

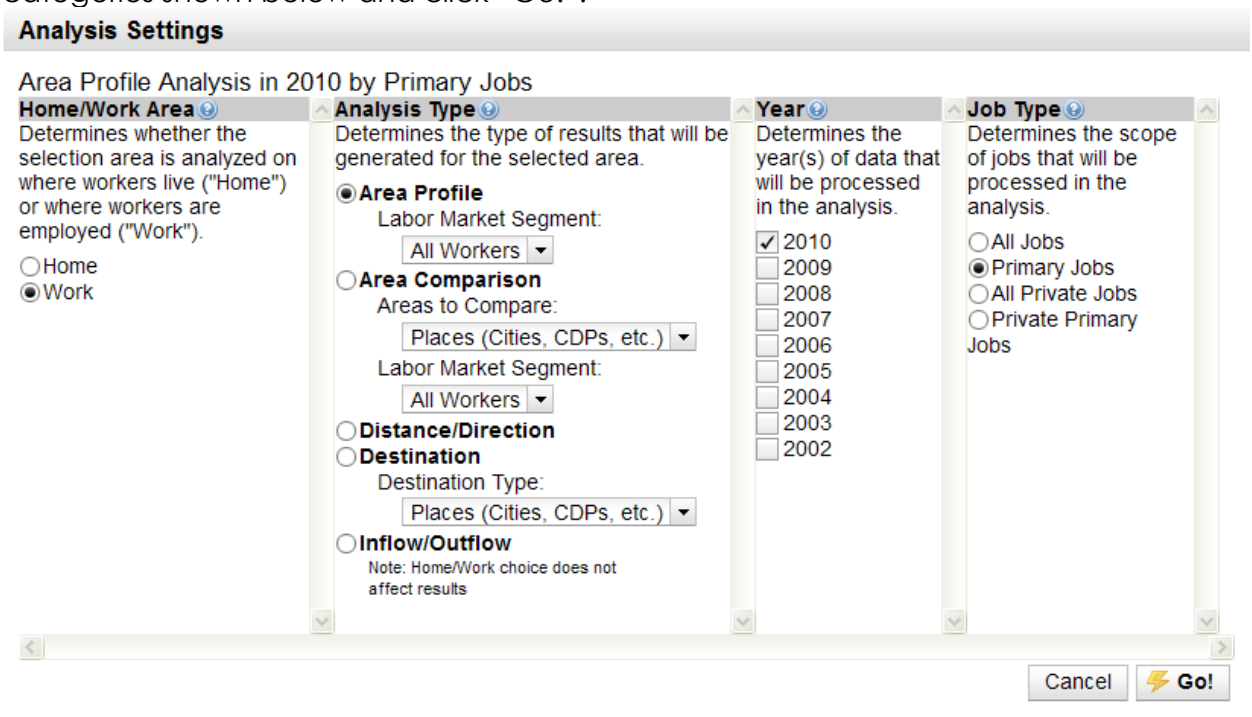
1. Go to http://www.nhhfa.org/rent_dah.cfm and download the "Printable Directory of Assisted Housing (with Accessible Unit Listing)" Microsoft Word document.
2. Convert this Microsoft Word document into a spreadsheet using Microsoft Excel so that the fields are separated into columns. (Excel can be obtained by calling NH Housing).
3. Using GIS, geocode the Housing Units based on the address data in the Excel table using GIS. (GIS Shapefile can be obtained by contacting SWRPC).
4. Go to http://onthemap.ces.census.gov/



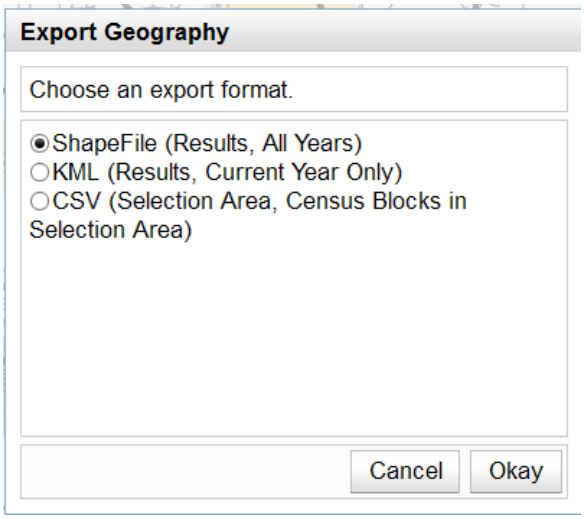
5. In order to gather this information for your region, you must select an option under "Import Geography". You will have the option to import your RPC's towns in either a KML, SHP, or GPS format. When importing from a shapefile, you will need to choose the .shp; .shx; and .prj of the RPC shapefile. Once you have imported your proper geography click "Import".



6. Next, click "Select All Polygons" from the options on the left. The select "Continue with Selected Features". In the upper left hand corner select "Confirm Selection". A pop up will come up displaying information about your Selection Area. Click "Perform Analysis on Selection Area".
7. Select "Work"; Select Area Profile; Choose 2010; and Primary Jobs from the categories shown below and click "Go!".



8. On the left hand side of the webpage you will want to click "Zoom to Selection" if you have not already done so.
9. Use the options on the left side of the screen under "Report/Map Outputs", select "Export Geography". You will be given the option to export to either a Shapefile or KML.



10. Import the geocoded Assisted Housing data into ArcGIS and overlay the two datasets.
11. Each region will be responsible for determining which areas constitute as being "major employment centers" based on the jobs per square mile figures, which can be found in the "thermals_2010_legend.csv" file, or when you drag the "thermals_2010_gif.lyr" into GIS. Calculate the number of Assisted Housing units by performing an analysis of the number of units that fall within the determined area or distance of major employers.

The result will be two geographic data sets: Assisted Housing shapefile for the State (which you can query using the RPC Code); the OnTheMap exported geography containing the thematic data layer showing jobs per square mile as well as a point shapefile showing business location data mapped by Census Block. In the "Points_2010" shapefile - Total Employees/Jobs are under the heading of c000 in the shapefile.

Documentation Author: S. Waleryszak, SWRPC

Variable: Gasoline and Diesel Consumption [ID# 401]

Description: Percent change in gasoline and diesel consumption over time.

Source_Name: US Department of Transportation; Office of Highway Policy Information; Highway Statistics Series
Source_Date: Last Updated June 25, 2012
Source_URL: http://www.google.com/publicdata/explore?ds=gb66jodhlsaab_

Geography: Statewide

Methodology:

Percent change in gasoline and percent change in diesel were calculated by 1 year, by 5 years, and by 10 years.

$$\%\ Change\ over\ Time = \left(\frac{New\ Year\ Data - Old\ Year\ Data}{Old\ Year\ Data}\right) \times 100$$

	% Change of Gasoline over time				% Change of Diesel over time			
Year	Gallons of Gas	% Change By Year	% Change by 5 years	% Change by 10 years	Gallons of Diesel	% Change By Year	% Change by 5 years	% Change by 10 years
1950	128,140,000	3.74%			460,000			
1951	132,929,000	4.29%			582,000	26.5%		
1952	138,632,000	7.00%			608,000	4.5%		
1953	148,341,000	5.14%			624,000	2.6%		
1954	155,965,000	6.68%			618,000	-1.0%		
1955	166,387,000	5.91%	29.85%		1,257,000	103.4%	173.26%	
1956	176,213,000	5.07%			942,000	-25.1%		
1957	185,139,000	0.22%			1,236,000	31.2%		
1958	185,539,000	3.57%			1,473,000	19.2%		
1959	192,156,000	1.99%			1,889,000	28.2%		
1960	195,980,000	0.00%	17.79%	52.94%	2,333,000	23.5%	85.60%	407.17%
1961	195,980,000	4.52%			2,793,000	19.7%		
1962	204,833,000	5.16%			3,314,000	18.7%		
1963	215,404,000	5.62%			4,036,000	21.8%		

Etc.

Documentation Author: Amy Kizak, SNHPC

Variable: Greenhouse Gas (GHG) emissions attributed to transportation [ID# 402]

Description: Percentage of GHG emissions attributed to transportation.

Source_Name: EPA US GHG Inventory
Source_Date: 2012
Source_URL:
http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2012-Main-Text.pdf

Geography: National Statistic. No local geographic component.

Methodology:

In the 2012 US EPA GHG Inventory report, a calculation (performed in 2010), reports the transportation sector contributed 1,834 teragrams (1 million metric tons) of GHG emissions accounting for 26.9 percent out of the major contributing sectors, Table 2-12.

Statistic reported annually.

Documentation Author: Derek Serach, SNHPC

Variable: Rail Lines Capable of 40 mph speed [ID# 403]

Description: This layer includes rail Line that is capable of operation at least 40 mph for freight and 60 mph for passenger.

Source_Name: National Transportation Atlas Database Railway Network
Source_Date: 2012
Source_URL: http://www.granit.unh.edu/data/search?dset=rr

Source_Name: NH DOT 2011 Scorecard
Source_Date: 2011
Source_URL: http://www.nh.gov/dot/org/commissioner/balanced-scorecard/department/documents/bs_performance_rail_lines_40mph.pdf

Geography: GIS Line features; report at RPC level.

Methodology:

The NH DOT Scorecard Report 2011 lists the following Class 3 and 4 track:

- The Freight Main Line owned and operated by Guilford Rail System, now Pan Am Railways (ST), which services the Downeaster Amtrak service with stops in Exeter, Durham, and Dover.
- New England Central Connecticut River Line (NECR), running along the western border of NH.
- (portions of) The St. Lawrence & Atlantic (SLR), which runs through northern NH via Berlin.
- (portions of) The New Hampshire Northcoast (NHN), which runs along the eastern boundary of NH between Rollinsford and Ossipee.

Filter: "STATEAB" = 'NH' and ("RROWNER1" = 'NECR' OR "RROWNER1" = 'SLR' or "RROWNER1" = 'NHN' or ("RROWNER1" = 'ST' and "TRKRGHTS1" = 'AMTK'))

Note: Information regarding which portions of St. Lawrence & Atlantic, and New Hampshire Northcoast lines to exclude from Class 3 is unavailable; these entire lines were included in this selection set, leading to an over-reporting of total mileage for these rail lines. The 2011 DOT scorecard reports 103 miles of rail line capable of 40 mph speed statewide. This layer contains 162 miles of rail.

Documentation Author: Derek Serach, SNHPC

Variable: **Red Listed Bridges** [ID# 404]

Description: This layer contains locations of bridges with red-list status, requiring interim inspections due to known deficiencies, poor conditions, weight restrictions, or type of construction. These structures are inspected twice yearly.

Source_Name: NHDOT Bridges GIS layer (available by request)
Source_Date: 2/21/2013
Source_URL: for more resources and information go to http://www.nh.gov/dot/org/projectdevelopment/bridgedesign/documents.htm

Geography: GIS points; report at municipality and region level

Methodology:

Received Bridges point shapefile from NHDOT. Filter Red List= State Redlist.

Documentation Author: Derek Serach, SNHPC

Variable: Pavement Condition [ID# 405]

Description: Miles of road by pavement condition as classified by NHDOT Ride Comfort Index (RCI).

Source_Name: NHDOT RCI GIS Datalayer
Source_Date: 2011
Source_URL:

Source_Name: NH DOT Report
Source_Date: 2011
Source_URL: http://www.nh.gov/dot/org/commissioner/balanced-scorecard/department/documents/bs_performance_pavecond.pdf

Source_Name: NH DOT 10 year report
Source_Date: Map based on 2008 data
Source_URL:
http://www.nh.gov/dot/org/projectdevelopment/planning/typ/documents/02_PaveCond_All_11-20.pdf

Geography: GIS Line features; reportable by municipality or Region

Methodology:

NHDOT's Ride Comfort Index (RCI) rates NHDOT-maintained roads relative to road "roughness" experienced by a motorist, as follows:

- RCI 0 - 2.49: "Poor, Major Work Required"
- RCI 2.50 -3.50: "Fair, Some Work Required"
- RCI 3.51-5.0: "Good, No Work Required"

Road segments in the inventory were classified as Poor, Fair, or Good, in a new field called, "Condition" with respect to these breakdowns.

Documentation Author: Derek Serach, SNHPC

Variable: Tons of freight shipped via all modes [ID# 406]

Description: Total tons of freight by air, railway, waterway, and motor carrier transportation

Source_Name: NH DOT 2011 Scorecard
Source_Date: 2011
Source_URL:
http://www.nh.gov/dot/org/commissioner/documents/bsc_booklet_weblr.pdf

Source_Name: NH DOT 2011 Reporting
Source_Date: 2011
Source_URL: http://www.nh.gov/dot/org/commissioner/balanced-scorecard/department/documents/bs_performance_totalcargoshipped.pdf

Geography: Statewide statistic; Not available by region.

Methodology:

In the 2011 NH DOT Scorecard report, NH DOT reports in 2009 the total tons of freight shipped via all modes (including air, railway, waterway, and motor carrier) was 68,677,213. This number is updated every 5 years.

The second source includes mode-specific totals; calculation was performed before the current recession and may not represent current conditions.

Documentation Author: Derek Serach, SNHPC

Variable: Public Transit Utilization [ID# 407]

Part 1

Description: Total annual public transit ridership, as measured by one-way trips, i.e. boardings, on transit vehicles.

Source_Name: NH DOT 2011 Scorecard
Source_Date: 2011
Source_URL:
http://www.nh.gov/dot/org/commissioner/documents/2011bsc_executivesummarylr.pdf

http://www.nh.gov/dot/org/commissioner/documents/bsc_booklet_weblr.pdf
(Pages 29 & 30)

Geography: Statewide

Methodology:

NH DOT Scorecard reported transit ridership of 3,415,291 for the year 2011.

Part 2:

Description: Total number of route miles served by local transit providers; does not include long-distance bus, train service, or other rideshare-related services.

Source_Name: Transit GIS data available by request from the NH RPCs
Source_Date: 2013
Source_URL:

Geography: GIS line features; Report at region level

Methodology:

Received local transit shapefiles from RPC's. Merged together if multiple files. Dissolved FID. Created new attribute field MilesServe and calculated for length in miles.

For additional transit provider information, see:
http://www.nh.gov/dot/programs/rideshare/transit.htm

Documentation Author: Derek Serach, SNHPC

Variable: Travel Mode Share [ID# 408]

Description: Total percentage of workers commuting via walking, biking, transit, and carpooling.

Source_Name: American Community Survey (ACS) 5-year estimates, 2007-2011: Table B08301. Means of Transportation to Work for Workers 16 and Over.
Source_Date: 2010
Source_URL:
http://factfinder2.census.gov

Geography: Tract; report at tract, municipal, or RPC level

Methodology: Taken from HUD OSHC Guidance on Performance Measurement/Flagship Sustainability Indicators:
"Data Elements: All required data elements can be sourced from a single table in the ACS (or Census). In the ACS, data are found in *Table B08301. Means of Transportation to Work for Workers 16 and Over.* Data elements required are:

- Number of workers commuting by carpool
- Number of workers commuting by public transportation (excluding taxicab)
- Number of workers commuting by bicycle
- Number of workers commuting by foot (walking)
- Total number of workers
- **Step-by-step Guidance on Obtaining Data:**
  1. Go to http://factfinder2.census.gov
  2. In the left-hand sidebar, click on "Topics."
  3. Under "Select Topics to add to 'Your Selections,'" click on the plus sign next to "People."
  4. In the expanded list of topics that appears under "People," click on the plus sign next to "Employment."
  5. In the expanded list of topics that appears under "Employment," click on "Commuting (Journey to Work)"
  6. In the left-hand sidebar, click on "Geographies."
  7. Select a geographic type from the drop-down menu. The geographic type will depend upon the scope of grant projects. In general:

     c. Community Challenge grantees working on corridor- or neighborhood-scale projects will need to identify the census tracts or block groups that make up the project area using the "Address" or "Map" tabs at the top of the "Select Geographies" box. ***(Census Tract Level by Region)***

     i. Census tract-level data can be downloaded by selecting "Census Tract" in the "Select a geographic type" menu, selecting a state and county from the drop-down menus, and then selecting a census tract from the resulting list in the box marked "Select one or more geographic areas and click Add to Your Selections."

     ii. Block group data can be downloaded from the ACS Summary File by following the instructions in Appendix A: *Working with Census Block Group Data*.

d. Note that you can select multiple geographies from the drop-down menus by holding down the control key and clicking on multiple states, metro areas, or census tracts.

8. Click the "Add to Your Selections" button.

9. Click on "Close" in the upper-right corner of the "Select Geographies" box.

10. Scroll through the search results until you see the *Table ID B08301: Means of Transportation* to Work, and click on the table title to view the table.

a. If there are a large number of search results, you can locate the table more quickly by entering "B08301" in the "Narrow your search" box at the top of the "Search results" window.

b. Multiple results from different years and different estimates (1-year, 3-year, or 5-year) may be available for the same table. Select data from the desired year using estimate that is collected over the shortest time span (i.e., 1-year estimates are more desirable than 3- or 5-year estimates; 3-year estimates are more desirable than 5-year estimates).

c. At the top of the table view, under "Actions," click on "Download" to download the file in Excel format in order to facilitate calculations. If the data estimates download formatted as text, click the "!" error to convert them to numbers in order to facilitate calculations.

Basic Calculation Steps:

1. Sum number of workers commuting by carpool, public transportation, bicycling, and walking.

2. Divide by total number of workers and multiply by 100 to calculate the percentage of workers commuting by carpool, public transportation, bicycle, and foot.

3. If using multiple census geographies, create a weighted average by multiplying the percentage of workers commuting by carpool, public transportation, bicycle, and foot within each given geographical area by the percentage of total workers within the project area that are located within that area, and summing the results across all geographic areas. For in-depth instructions on calculating weighted averages, including sample calculations, refer to the separate *Weighted Averages Calculation Worksheet* "

Documentation Author: Amy Kizak, Derek Serach, SNHPC

Variable: Access to local transit [ID# 409]

Description: Population within a quarter (.25) mile of regional transit routes (ID# 407, Part 2).

Source_Name: NH Regional Transit Routes (ID #407, Part 2)
Source_Date: 2013
Source_URL:

Source_Name: 2010 Census TIGER Shape files for New Hampshire
Released by NH Office of Energy and Planning

Source_Date: Table attributes, July 2011

Source_URL:

Source_Name: NH DOT 2011 Scorecard
Source_Date: 2011
Source_URL:
http://www.nh.gov/dot/org/commissioner/documents/2011bsc_executivesummarylr.pdf

Source_Name: NH DOT Report
Source_Date:2011
Source_URL: http://www.nh.gov/dot/org/commissioner/balanced-scorecard/department/documents/bs_performance_multimodaltrans.pdf

Geography: Census block, report at the town or region level.

Methodology:

Selected by location census blocks within a .25 search radius of regional transit routes. Total Population for Selected Local Transit Blocks/Total Population for Region X 100.

In the 2011 NH DOT Scorecard report, it is reported that 24 percent of the state's population has access to multi-modal transportation.

Documentation Author: Derek Serach, SNHPC

Variable: Water and Sewer Utilization by Type [ID# 501]

Description: Population of Total Users by Town:

- Private well versus public water supply
- Public sewer versus private septic

Source_Name: USGS New Hampshire Water Use Data
Source_Date: 2005
Source_URL: http://nh.water.usgs.gov/projects/nhvtwateruse/data/NHTownSum2005.xlsx

Geography: Municipality

Methodology:

Note: USGS Methodology Summary: USGS analysis uses a proportion of the total road length within the census track that falls within the water/sewer service area to break out population (private vs. public water/sewer). For a more detailed review of the methodology used by USGS see page 11 at: http://pubs.usgs.gov/of/2009/1168/pdf/ofr2009-1168.pdf.

Public Water/Well Systems:

NHTownWith tab contains Total Population Data on Household Well and Community (Public) Water Systems

Apply Filter to Town Name Field and query as needed

Example:

	Population		
TOWN NAME	**Total**	**Household Wells**	**Community Water Systems**
Acworth	872	872	0
Albany	690	483	207
Alexandria	1,469	1,461	8
Allenstown	4,905	1,252	3,653
Alstead	1,993	1,927	66
Alton	4,990	3,905	1,085
Amherst	11,513	9,245	2,268
Andover	2,213	1,898	315

Public Sewer/Septic Systems:

NHTownRetFlw tab contains Total Population Data with On-Site Disposal Systems (Septic) and Wastewater Treatment Systems (Public Sewers)

Apply Filter to Town Name Field and query as needed

Example:

	Population		
TOWN NAME	**Total**	**On-Site Disposal Systems**	**Wastewater Treatment Systems (Sewers)**
Acworth	872	872	0
Albany	690	690	0
Alexandria	1,469	1,469	0
Allenstown	4,905	2,567	2,463
Alstead	1,993	1,993	0
Alton	4,990	4,990	0
Amherst	11,513	11,486	27
Andover	2,213	2,213	0

*Disclaimer: "The Water Distribution and Sewer Collection Areas data set has limited accuracy for the following reasons:

- The water distribution and sewer collection lines have been buffered to depict areas and, therefore, capture some parts of other roads within 200 feet that are not served;
- The data set shows the entire system, including conveyances that extend from the source of supply to the distribution system and may cross roads that are not actually served by the system;
- Water distribution or sewer collection lines may have been extended since the last revision of the data set; and
- The buffered lines were based on the NH DOT road data set rather than the census road data set, which may result in some minor discrepancies with the census blocks."

Possible Second Iteration: Census 2010 population data, updated road layer, updated service area layer (available April 2013) to estimate the desired metrics.

Changed Livermore to Unorganized Territory; spelling changes on

Documentation Author: Matt Sullivan, SRPC

Variable: Communities with Groundwater, Aquifer or Well-Head Protection Ordinances [ID# 502]

Description: Provides details on the groundwater protection ordinances for 93 communities in the state; does not cover ordinances related to surface water intakes. Also does not cover any regional ordinances covering multiple downs (e.g. Lakes Region Tri-Town ordinance for Belmont, Northfield & Tilton).

This database describes the scope of the ordinance with respect to these factors:

DES Best Management Practices; stated minimum lot size; septic definition reduces density; types of development (e.g. low impact); ban on underground storage tanks, banned risky uses; on-site hazardous disposal, planning board override authority, and environmental performance standards.

No = ordinance does not meet criteria
Yes = ordinance meets criteria

Source_Name: DES Groundwater Ordinances
Source_Date: 2012
Source_URL: Groundwater Ordinance Database requested from DES

Geography: Municipality, Statewide/Regional Statistic

Methodology:

Sheet 1 tab contains Town Name field and Name field necessary for analysis

1. Apply Filter to "Town Name" Field and query as needed
    a. Type of Groundwater Ordinance indicated in "Name" field

Example:TOWN_NAME	Town Id	TOWN	Date	Name
ALLENSTOWN	171	ALLENSTOWN	3/8/2011	Groundwater Protection Overlay District
ALTON	109	ALTON	3/9/2004	Aquifer Protection Overlay District
AMHERST	224	AMHERST	3/1/2003	Aquifer Cons. District-Zoning Ord.
ANTRIM	183	ANTRIM	3/11/2008	Aquifer and Wellhead Protection District
ASHLAND	93	ASHLAND	3/8/2005	
BARNSTEAD	135	BARNSTEAD		Aquifer Recharge District
BARRINGTON	151	BARRINGTON	1/6/2005	Groundwater Protection District

*Disclaimer: Accuracy of data collected by DES is dependent on town reporting

Documentation Author: Matt Sullivan, SRPC

Variable: Potential Water Supply Lands in Conservation [ID# 601]

Description: Acreage and percent of municipality's potential water supply land area conserved. DES Favorable Gravel Well Analysis (FGWA) is a constraints-based analysis that eliminates areas that are not suitable for developing large water supply wells from areas that have potential for high yields based on higher aquifer transmissivity, but not yet used for public water supply. The FGWA data excludes all potential contamination sources from the aquifer formations, leaving only the areas that are suitable for municipal water supply.

Source_Name: DES Favorable Gravel Well Analysis GIS layers
Source_Date: July 2011
Source_URL:

Source_Name: GRANIT Conservation and Protected Lands*
Source_Date: November 2012
Source_URL: http://www.granit.unh.edu/data/search?dset=consnh

Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

Geography: Landscape-scale GIS polygons; report at Municipality level.

Methodology:
*Note – Regional Planning Commissions may add additional lands not in GRANIT.

Dataset is based on the attribute fgwa75. This attribute includes wells producing at least 75 gallons per minute (gpm), which includes a sanitary protective radius (SPR) of 300'.

In GIS, apply a definition query in conservation lands layer to LEVEL = 1, Permanent Conservation Lands. Perform INTERSECT on political boundaries layer, favorable gravel well analysis layer, and conservation lands layer. Next, perform DISSOLVE on intersected layer, set Dissolved Fields to NAME, RPA, and ACRES. Add new field (AC_PWSL_CN) to the dissolved layer attribute table to determine the acreage of potential water supply land in conservation. Calculate acreage for new field. Add another new field (PCT_WAP_CN) to dissolved layer attribute table to determine the percentage of potential water supply land in conservation.
Using the Field Calculator: PCT_PWSL_CN = [AC_PWSL_CN]/ [ACRES] * 100

Export attribute table to dbase format, open in Excel.

Documentation Author: M. Therrien, LRPC

Variable: Wildlife Habitat in Conservation [ID# 602]

Description: Acreage and percent of municipality's important wildlife habitat area conserved.

Source_Name: NH Wildlife Action Plan 2010: Wildlife Habitat Ranked by Ecological Condition
Source_Date: March 2010
Source_URL: http://www.granit.unh.edu/data/search?dset=wap10_tiers

Source_Name: GRANIT Conservation and Protected Lands*
Source_Date: November 2012
Source_URL: http://www.granit.unh.edu/data/search?dset=consnh

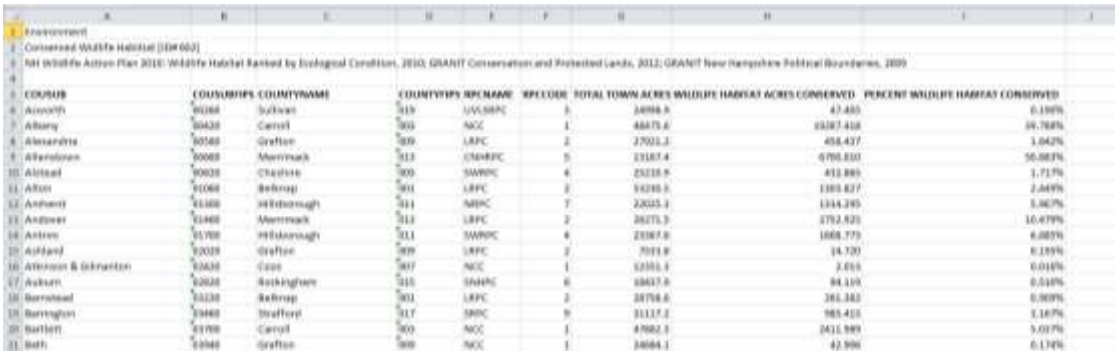
Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

Geography: Landscape-scale GIS polygons; report at Municipality level.

Methodology:
*Note – Regional Planning Commissions may add additional lands not in GRANIT.

In GIS, apply a definition query in wildlife action plan layer to GRIDCODE = 1 (Highest ranked habitats). Apply a definition query in conservation lands layer to LEVEL = 1 (Permanent Conservation Lands). Perform INTERSECT on political boundaries layer, wildlife action plan layer, and conservation lands layer. Next, perform DISSOLVE on intersected layer, set Dissolved Fields to NAME, RPA, and ACRES. Add new field (AC_WAP_CN) to the dissolved layer attribute table to determine the acreage of important wildlife habitat in conservation. Calculate acreage for new field. Add another new field (PCT_WAP_CN) to dissolved layer attribute table to determine the percentage of important wildlife habitat in conservation.
Using the Field Calculator: PCT_WAP_CN = [AC_WAP_CN]/[ACRES] * 100

Export attribute table to dbase format, open in Excel.



Documentation Author: M. Therrien, LRPC

Variable: Productive Soils in Conservation [ID# 603]

Description: Acreage and percent of municipality's productive soils area conserved.

Source_Name: Soil Survey Geographic (SSURGO) database for New Hampshire
Source_Date: January 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=soils/nh

Source_Name: GRANIT Conservation and Protected Lands*
Source_Date: November 2012
Source_URL: http://www.granit.unh.edu/data/search?dset=consnh

Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

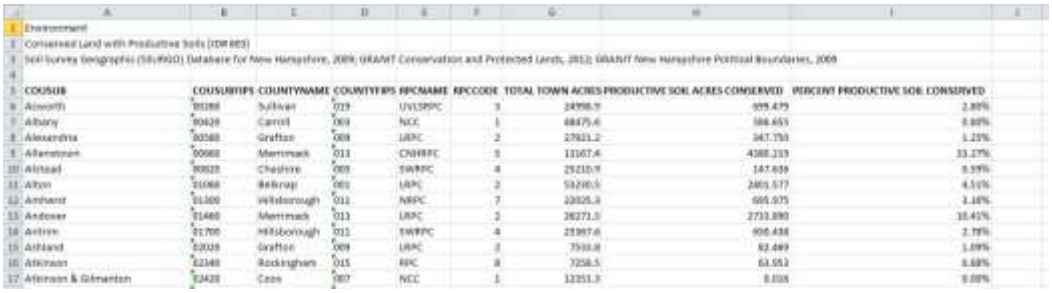
Geography: Landscape-scale GIS polygons; report at Municipality level.

Methodology:
*Note – Regional Planning Commissions may add additional lands not in GRANIT.

Disclaimer: There are edge match issues in soil layer between counties in some areas.

In GIS, apply a definition query in soils layer to FrmlndCls = All areas are prime farmland, Farmland of local importance, and Farmland of statewide importance. Apply a definition query in conservation lands layer to LEVEL = 1. Perform INTERSECT on political boundaries layer, soils layer, and conservation lands layer. Next, perform DISSOLVE on intersected layer, set Dissolved Fields to NAME, RPA, and ACRES. Add new field (AC_SOILS_CNS) to the dissolved layer attribute table to determine the acreage of productive soils in conservation. Calculate acreage for new field. Add another new field (PCT_ SOILS _CNS) to dissolved layer attribute table to determine the percentage of productive soils in conservation.
Using the Field Calculator: PCT_ SOILS _CNS = [AC_ SOILS _CNS]/ [ACRES] * 100

Export attribute table to dbase format, open in Excel.



	A	B	C	D	E	F	G	H	I	J
1	Environment									
2	Conserved Land with Productive Soils (ID# 603)									
3	Soil Survey Geographic (SSURGO) Database for New Hampshire, 2009; GRANIT Conservation and Protected Lands, 2012; GRANIT New Hampshire Political Boundaries, 2009									
4										
5	COUSUB	COUSUBFIPS	COUNTYNAME	COUNTYFIPS	RPCNAME	RPCCODE	TOTAL TOWN ACRES	PRODUCTIVE SOIL ACRES CONSERVED	PERCENT PRODUCTIVE SOIL CONSERVED	
6	Acworth	00180	Sullivan	019	UVLSRPC	3	24998.9	699.479	2.80%	
7	Albany	00420	Carroll	003	NCC	1	48475.6	388.655	0.80%	
8	Alexandria	00580	Grafton	009	LRPC	2	27921.2	347.759	1.25%	
9	Allenstown	00660	Merrimack	013	CNHRPC	5	11167.4	4388.233	33.27%	
10	Alstead	00820	Cheshire	005	SWRPC	4	25210.9	147.636	0.59%	
11	Alton	01060	Belknap	001	LRPC	2	53230.5	2401.577	4.51%	
12	Amherst	01300	Hillsborough	011	NRPC	7	22025.3	695.975	3.16%	
13	Andover	01460	Merrimack	013	LRPC	2	26271.3	2733.890	10.41%	
14	Antrim	01700	Hillsborough	011	SWRPC	4	23367.6	656.438	2.78%	
15	Ashland	02020	Grafton	009	LRPC	2	7593.8	82.489	1.09%	
16	Atkinson	02340	Rockingham	015	RPC	8	7258.5	63.552	0.88%	
17	Atkinson & Gilmanton	02420	Coos	007	NCC	1	12251.3	0.703	0.00%	

Documentation Author: M. Therrien, LRPC

Variable: Flood Storage Land in Conservation [ID# 604]

Description: Acreage and percent of municipality's flood storage land area conserved.

Source_Name: Soil Survey Geographic (SSURGO) database for New Hampshire
Source_Date: January 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=soils/nh

Source_Name: GRANIT Conservation and Protected Lands*
Source_Date: November 2012
Source_URL: http://www.granit.unh.edu/data/search?dset=consnh

Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

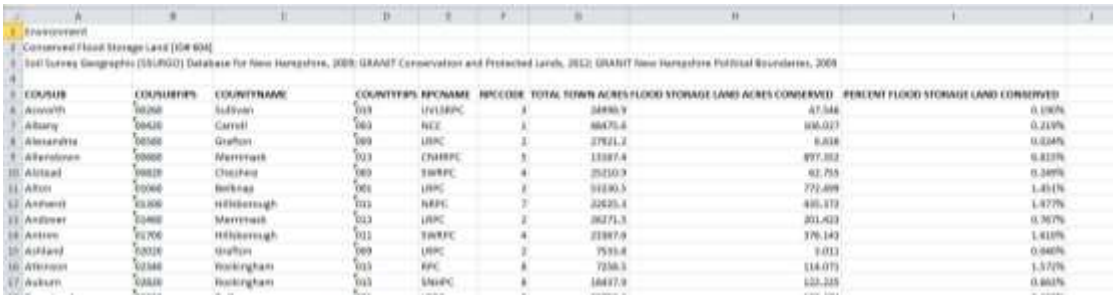
Geography: Landscape-scale GIS polygons; report at Municipality level.

Methodology:
*Note – Regional Planning Commissions may add additional lands not in GRANIT.

Disclaimer: There are edge match issues in soil layer between counties in some areas.

In GIS, apply a definition query in soils layer to HdrcRating = All Hydric. Apply a definition query in conservation lands layer to LEVEL = 1. Perform INTERSECT on political boundaries layer, soils layer, and conservation lands layer. Next, perform DISSOLVE on intersected layer, set Dissolved Fields to NAME, RPA, and ACRES. Add new field (AC_FLD_CNS) to the dissolved layer attribute table to determine the acreage of flood storage land in conservation. Calculate acreage for new field. Add another new field (PCT_ FLD _CN) to dissolved layer to determine the percentage of flood storage land in conservation
Using the Field Calculator: PCT_ FLD _CN = [AC_ FLD _CNS]/ [ACRES] * 100

Export attribute table to dbase format, open in Excel.



Documentation Author: M. Therrien, LRPC

Variable: Forest Lands [ID# 605]

Description: Acres and percent of forested land in municipality.

Source_Name: NH Wildlife Action Plan 2010: Wildlife Habitat Ranked by Ecological Condition
Source_Date: March 2010
Source_URL: http://www.granit.unh.edu/data/search?dset=wap10_tiers

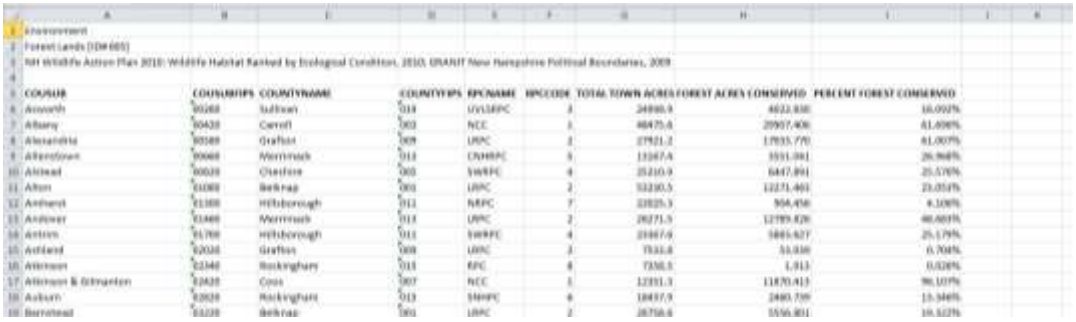
Source_Name: GRANIT New Hampshire Political Boundaries
Source_Date: April 2009
Source_URL: http://www.granit.unh.edu/data/search?dset=pb

Geography: Landscape-scale GIS polygons; report at Municipality level.

Methodology:

In GIS, apply a definition query in wildlife action plan layer to PRIORITY = Tier 1 Matrix Forest, Tier 2 Matrix Forest, Tier 3 Matrix Forest, and TNCFOBLOCK. Perform INTERSECT on political boundaries layer and wildlife action plan layer. Next, perform DISSOLVE on intersected layer, set Dissolved Fields to NAME, RPA, and ACRES. Add new field (AC_FOREST) to the dissolved layer attribute table to determine the acreage of forested land in municipality. Calculate acreage for new field. Add another new field (PCT_ FOREST) to dissolved layer attribute table to determine the percentage of forested land in municipality
Using the Field Calculator: PCT_ FOREST = [AC_ FOREST]/ [ACRES] * 100

Export attribute table to dbase format, open in Excel.



Documentation Author: M. Therrien, LRPC

Variable: Unemployment/Employment Rates [ID# 701]

Description: Current rate and change in rate of employment.

Source_Name: NH Employment Security, Economic and Labor Market Information Bureau
Source_Date: 2000 to 2012
Source_URL: http://www.nhes.nh.gov/elmi/statistics/candt-arch.htm

Geography: Municipality

Methodology:
(NOTE: Data set presents current rate by year, 2000 – 2012, and change in rate of employment for 2011 – 2012 only.)

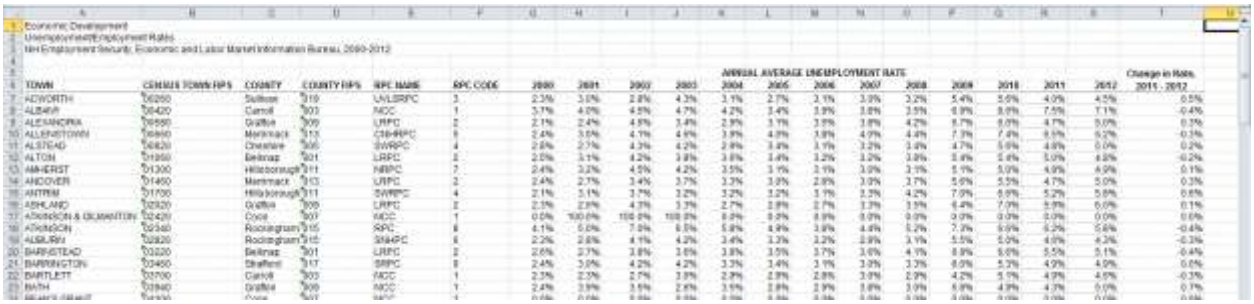
Go to the New Hampshire Data & Statistics – Labor Force & Unemployment Data Archive webpage link: http://www.nhes.nh.gov/elmi/statistics/candt-arch.htm. Then go to NHetwork and select a geographic area by type.

For City and Town data, download Benchmarked City & Town Data formatted MS Excel spreadsheets that contain the Monthly and Annual Average unemployment rates for all municipalities for the years of 2000 through 2012. NHetwork has data for the State, Counties and NH Planning regions.

In Excel, create new file with columns for Town, Census Town FIPS, County, County FIPS, RPC Name, RPC code, Annual Average Unemployment Rate for each year, and Change in Rate. Populate the Annual Average Unemployment Rate column with the data from the column (ANN AVG) in the benchmarked tables.

Find the change in rate of employment by calculating the difference between the most recent year rate and the previous year rate for the time period desired.

Change in rate of employment = most recent year rate – previous year rate



Documentation Author: M. Therrien, J. Coogan, LRPC

Variable: Median Household Income [ID# 702]

Description: Median household income and per capita income.

Source_Name: US Census Bureau – American Community Survey (ACS)
Source_Date: 2007 - 2011
Source_URL:
http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none

Geography: Municipality

Methodology:
Go to US Census Bureau American Fact Finder search page.

1) Select Geographies
    a) Select from: most requested geographic types
    b) Select a geographic type: County Subdivision – 060
    c) Select a state: New Hampshire
    d) Select a county: each county selected separately with county specific municipalities.
    Choose by county if downloading information to MS Excel. **OR**- skip to next step for single table with all municipalities included to view on-line (full table with all municipalities will not download because it exceeds limit of 230 selections allowed)
    e) Select one or more geographic areas: All County Subdivisions within XXXX County

2) Choose Table ID: DP03 – Selected Economic Characteristics, Dataset: 2007 - 2011 ACS 5-year estimates

3) In Table View tab, under Actions:
    a) Select Download: Presentation-ready formats, Microsoft Excel (.xls)

In Excel, create new file with columns for Town, Census Town FIPS, County, County FIPS, RPC Name, RPC code, Median Household Income (Estimate, Margin of Error), and Per Capita Income (Estimate, Margin of Error). Populate the Median Household Income column with the data from INCOME AND BENEFITS: Median household income (dollars) and Per Capita Income column with data from INCOME AND BENEFITS: Per capita income (dollars).

Documentation Author: M. Therrien, J. Coogan, LRPC

Variable: Participation Rates and Age Distribution of Workforce (Young Persons in the Workforce) [ID# 703]

Description: Percent of workforce in various age categories.

Source_Name: 2007-2011 American Community Survey 5-Year Estimates
Source_Date: 2007-2011
Source_URL: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Geography: Municipality (*Note: for smaller populations the margin of error might be very high. Data should be used with caution.)*

Methodology:

Search for table ID B23001 for 5 year estimate. Sum the total population estimate and labor force population by age category. Divide the estimated labor force by estimated population for each cohort to get the labor force participation rate by age (Percent of Population by Age Group in Labor Force). For select age groups divide the estimated population in the labor force per age group by the total labor force population to derive the age distribution of the labor force (Percent of Total Labor Force by Age Group.

Labor Force Participation Rates:
Age Categories:

- 16-19
- 20-21
- 22-24
- 25-29
- 30-34
- 35-44
- 45-54
- 55-59
- 60-61
- 62-64
- 65-69
- 70-74
- 75 and over

Subtotaled Age Categories

- 16-21
- 25-54
- 55-64
- 65 and over

Data Fields for each Age Category:

- Estimate Population
- Estimate Population in Labor Force
- Percent of Population by Age in Labor Force

Labor Force Distribution Fields

- Percent of Total Labor Force Age 16-21 years
- Percent of Total Labor Force Age 22-54 years
- Percent of Total Labor Force Age 55-64 years
- Percent of Total Labor Force Over 64 Years

Documentation Author: Tara Bamford, North Country Council, J. Czysz, Nashua RPC

Variable: Educational Attainment [ID# 704]

Description: Educational Attainment for various age categories

Source_Name: 2007-2011 American Community Survey 5-Year Estimates
Source_Date: 2007-2011
Source_URL: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Geography: Municipality (*Note: for smaller populations the margin of error might be very high. Data should be used with caution.)*

Methodology:

Search for educational attainment table ID S1501 for 5 year estimate. Aggregate data to report the:

- Total population within the Age Group
- % of Population within the Age Group that is a High School Graduate or Higher
- % of Population within the Age Group that has a Bachelor's Degree or Higher

Age Groups:

- 18-24
- 25-34
- 35-44
- 45-64
- 65 and Over

To compute the total population's educational attainment, search for table B15001. Aggregate gender and age group data to compute the:

- Total Population
- Total % of Population that is a High School Graduate or Higher
- Total % of Population that has a Bachelor's Degree or Higher

Sources: 2007-2011 American Community Survey 5-Year Estimates, Table S1501, B15001

Documentation Author: Tara Bamford, North Country Council, J. Czysz, Nashua RPC

Variable: Employment by Sector [ID# 705]

Description: Number of workers covered by unemployment insurance in region.

Source_Name: NH Employment Security Economic and Labor Market Information Bureau, Covered Employment & Wages - Annual Averages
Source_Date: 2011
Source_URL: http://www.nhes.nh.gov/elmi/statistics/qcew-data.htm

Geography: All regions will include data for regional planning area. Optional tables include NH portion of Labor Market Areas.

Methodology:

Reduce tables provided to NAICS 2 digit codes as shown in the following example:

North Country Council Planning Region - 1

Annual Average Employment 2011

Goods-Producing Industries	**5116**	
Agriculture/Forestry/Fishing		348
Mining		31
Construction		1616
Manufacturing		3122
Service-Providing Industries	**29032**	
Utilities		190
Wholesale Trade		565
Retail Trade		7706
Transportation and Warehousing		779
Information		426
Finance and Insurance		722
Real Estate and Rental and Leasing		477
Professional and Technical Service		640
Management of Companies/Enterprises		427
Administrative and Waste Services		566
Educational Services		425
Health Care and Social Assistance		5904
Arts, Entertainment, and Recreation		1824
Accommodation and Food Services		7329
Other Services Except Public Admin		1051
Total Government	**7696**	
TOTAL	**41844**	

Documentation Author: Tara Bamford, North Country Council

Variable: Employment Projections [ID# 706]

Description: Projected employment by occupational group.

Source_Name: NH Employment Security Economic and Labor Market Information Bureau, Long-Term Occupational Projections 2010 – 2020
Source_Date: January 2013
Source_URL: http://www.nhes.nh.gov/elmi/products/proj.htm

Geography: Regional Planning Commission area.

Methodology:

Use the following table:

http://www.nhes.nh.gov/elmi/products/documents/occ-projections-plan-reg.xls

The rows and columns shown in the following example (a regional option would be to use the more detailed occupation categories/rows):

North Country Council Planning Region – 1

	2010	2020	Numeric	Percent
Occupational Group	Employment	Projected	Change	Change
Total Employment	46,410	47,591	1,181	2.5%
Management Occupations	2,982	2,918	-64	-2.1%
Business and Financial Operations Occupations	1,111	1,159	48	4.3%
Computer and Mathematical Occupations	320	351	31	9.7%
Architecture and Engineering Occupations	257	253	-4	-1.6%
Life, Physical, and Social Science Occupations	222	227	5	2.3%
Community and Social Services Occupations	1,028	1,193	165	16.1%
Legal Occupations	130	126	-4	-3.1%
Education, Training, and Library Occupations	3,062	3,233	171	5.6%
Arts, Design, Entertainment, Sports, and Media Occupations	495	489	-6	-1.2%
Healthcare Practitioners and Technical Occupations	2,522	2,865	343	13.6%
Healthcare Support Occupations	1,277	1,412	135	10.6%
Protective Service Occupations	846	859	13	1.5%
Food Preparation and Serving Related Occupations	5,421	5,574	153	2.8%
Building and Grounds Cleaning and Maintenance Occupations	2,833	2,952	119	4.2%
Personal Care and Service Occupations	2,112	2,351	239	11.3%
Sales and Related Occupations	5,955	5,759	-196	-3.3%
Office and Administrative Support Occupations	7,053	6,982	-71	-1.0%
Farming, Fishing, and Forestry Occupations	452	426	-26	-5.8%
Construction and Extraction Occupations	1,796	1,873	77	4.3%
Installation, Maintenance, and Repair Occupations	1,958	2,024	66	3.4%

Production Occupations	2,321	2,270	-51	-2.2%
Transportation and Material Moving Occupations	2,257	2,295	38	1.7%

Documentation Author: Tara Bamford, North Country Council

Variable: Carbon Emissions [ID# 801]

Description: Carbon dioxide (CO2), the main driver of climate change, has an atmospheric residence time ranging from decades to hundreds of years and will remain in the atmosphere for, on average, 100 years once released. Data tabulated in million metric tons of CO2 equivalents (MMTCO2e).

Source_Name: The New Hampshire Climate Action Plan

Source_Date: March 2009

Source_URL:http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/nhcap_final.pdf

Geography: Statewide

Methodology:

Table 1.2 – New Hampshire Projected Greenhouse Gas Emissions (Business as usual)

	Emissions [$MMTCO_2e/yr$]		
	2012	2025	2050
Total Energy related Emissions	**23.76**	**29.30**	**39.95**
Commercial	1.47	1.64	1.98
Industrial	1.53	1.81	2.34
Residential	3.38	3.92	4.96
Transportation	9.74	12.66	18.27
Electric Power	7.63	9.26	12.39
Total Non-Combustion related Emissions	**1.58**	**2.07**	**3.00**
CH_4 and N_2O emissions	0.73	0.75	0.79
Industrial Emissions	0.84	1.31	2.21
PFC, HFC, and SF_6			
Total Emissions	**25.34**	**31.36**	**42.95**

Data was taken from the above table.

Documentation Author: R. Pruyne, RPC

Variable: Vehicle Miles Traveled – Total and Per Capita VMS [ID# 802]

Description: Vehicle miles traveled (VMT) – the number of miles that vehicles (including light duty-vehicles [e.g., cars, small trucks], motorcycles, buses, and trucks) are driven – provide a valuable measure of the manner by which people and freight move around the state. In addition, VMT is a useful measure to evaluate the success of smart growth land use planning and integrated multi-modal transportation systems that are designed to reduce VMTs.

Source_Name: Federal Highway Administration – Functional System Travel – 2011, Annual Vehicle Miles
Source_Date: 2011 (compiled Nov. 2012)
Source_URL: http://www.fhwa.dot.gov/policyinformation/statistics/2011/vm2.cfm

Source_Name: ACS 2010 1 Year Estimate – DP05 – "Total Population"
Source_Date: 2010
Source_URL:
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_DP05&prodType=table

Geography: Statewide

Methodology:

Divide VMT (millions of miles) by population (people) = X (VMT per capita)

Documentation Author: R. Pruyne, RPC

Variable: Average Annual Household Energy Expenditures [ID# 803]

Description: This indicator shows the Average Annual use of energy in dollars. This includes Coal, Natural Gas, Petroleum sources, Biomass (wood), and Retail Electricity.

Source_Name: US Energy Information Administration Website – Table E10 – "Table E10. Residential Sector Energy Expenditure Estimates, 2010 (Million Dollars)
Source_Date: 2010
Source_URL:
http://www.eia.gov/beta/state/seds/data.cfm?incfile=/state/seds/sep_sum/html/sum_ex_res.html&sid=NH

Source_Name: ACS 2010 1 Yr - Occupied housing units (Line 3 of Table DP04)
Source_Date:2010
Source_URL:http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/10_1YR/DP04/0400000US33

Geography: State

Methodology:
Obtain total Energy used for the state. Obtain household estimate (Occupied Housing Units) for corresponding year. Divide Energy used by number of households. Note: Households= Housing Units – Vacant Housing Units.

Documentation Author: R. Pruyne, RPC

Variable: Energy Expenditure – Per Person Energy Expenditure for Transportation [ID# 804]

Description: Amount of energy used per person in NH for the purposes of transportation.

Source_Name: US Energy Information Administration Website – Table CT7. Transportation Sector Energy Consumption Estimates, Selected Years, 1960-2010, New Hampshire
Source_Date: 2010
Source_URL: http://www.eia.gov/state/seds/sep_use/notes/use_print.pdf

Source_Name: ACS 2010 1 Year Estimate – DP05 – "Total Population"
Source_Date: 2010
Source_URL:
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_DP05&prodType=table

Geography: Statewide

Methodology:

Use the net energy use consumption for the transportation sector(in trillion BTU) from the US Energy Info. Admin. Website. Use State of NH Total Population estimate from ACS 2010 1 Yr Est Table DP05. Divide Transportation Energy used (Trillion BTUs) by Population (persons) = X (Trillion [10^12] BTUs per capita. Note: This is in BTUs and not cost. There are cost conversions, but they are highly variable over years and must consider the present-past-future value of money. I would not recommend tying this to money, BTUs are consistent across time, economy, outside economic conditions.

Important Definition: Transportation Sector: An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. In this report, natural gas used in the operation of natural gas pipelines is included in the transportation sector.

Documentation Author: R. Pruyne, RPC

Appendix I. FIPS Codes

TOWN	CENSUS TOWN FIPS	COUNTY	COUNTY FIPS	RPC NAME	RPC CODE
Acworth	00260	Sullivan	019	UVLSRPC	3
Albany	00420	Carroll	003	NCC	1
Alexandria	00580	Grafton	009	LRPC	2
Allenstown	00660	Merrimack	013	CNHRPC	5
Alstead	00820	Cheshire	005	SWRPC	4
Alton	01060	Belknap	001	LRPC	2
Amherst	01300	Hillsborough	011	NRPC	7
Andover	01460	Merrimack	013	LRPC	2
Antrim	01700	Hillsborough	011	SWRPC	4
Ashland	02020	Grafton	009	LRPC	2
Atkinson	02340	Rockingham	015	RPC	8
Atkinson & Gilmanton	02420	Coos	007	NCC	1
Auburn	02820	Rockingham	015	SNHPC	6
Barnstead	03220	Belknap	001	LRPC	2
Barrington	03460	Strafford	017	SRPC	9
Bartlett	03700	Carroll	003	NCC	1
Bath	03940	Grafton	009	NCC	1
Beans Grant	04100	Coos	007	NCC	1
Beans Purchase	04260	Coos	007	NCC	1
Bedford	04500	Hillsborough	011	SNHPC	6
Belmont	04740	Belknap	001	LRPC	2
Bennington	04900	Hillsborough	011	SWRPC	4
Benton	05060	Grafton	009	NCC	1
Berlin	05140	Coos	007	NCC	1
Bethlehem	05460	Grafton	009	NCC	1
Boscawen	06260	Merrimack	013	CNHRPC	5
Bow	06500	Merrimack	013	CNHRPC	5
Bradford	06980	Merrimack	013	CNHRPC	5
Brentwood	07220	Rockingham	015	RPC	8
Bridgewater	07540	Grafton	009	LRPC	2
Bristol	07700	Grafton	009	LRPC	2
Brookfield	07940	Carroll	003	SRPC	9
Brookline	08100	Hillsborough	011	NRPC	7
Cambridge	08420	Coos	007	NCC	1
Campton	08660	Grafton	009	NCC	1
Canaan	08980	Grafton	009	UVLSRPC	3
Candia	09300	Rockingham	015	SNHPC	6
Canterbury	09860	Merrimack	013	CNHRPC	5
Carroll	10100	Coos	007	NCC	1
Center Harbor	10660	Belknap	001	LRPC	2
Chandlers Purchase	11220	Coos	007	NCC	1
Charlestown	11380	Sullivan	019	UVLSRPC	3
Chatham	11780	Carroll	003	NCC	1
Chester	12100	Rockingham	015	SNHPC	6

TOWN	CENSUS TOWN FIPS	COUNTY	COUNTY FIPS	RPC NAME	RPC CODE
Chesterfield	12260	Cheshire	005	SWRPC	4
Chichester	12420	Merrimack	013	CNHRPC	5
Claremont	12900	Sullivan	019	UVLSRPC	3
Clarksville	13220	Coos	007	NCC	1
Colebrook	13780	Coos	007	NCC	1
Columbia	13940	Coos	007	NCC	1
Concord	14200	Merrimack	013	CNHRPC	5
Conway	14660	Carroll	003	NCC	1
Cornish	15060	Sullivan	019	UVLSRPC	3
Crawfords Purchase	16100	Coos	007	NCC	1
Croydon	16340	Sullivan	019	UVLSRPC	3
Cutts Grant	16660	Coos	007	NCC	1
Dalton	16820	Coos	007	NCC	1
Danbury	16980	Merrimack	013	LRPC	2
Danville	17140	Rockingham	015	RPC	8
Deerfield	17460	Rockingham	015	SNHPC	6
Deering	17780	Hillsborough	011	CNHRPC	5
Derry	17940	Rockingham	015	SNHPC	6
Dixs Grant	18340	Coos	007	NCC	1
Dixville2	18420	Coos	007	NCC	1
Dorchester	18740	Grafton	009	UVLSRPC	3
Dover	18820	Strafford	017	SRPC	9
Dublin	19140	Cheshire	005	SWRPC	4
Dummer	19300	Coos	007	NCC	1
Dunbarton	19460	Merrimack	013	CNHRPC	5
Durham	19700	Strafford	017	SRPC	9
East Kingston	21380	Rockingham	015	RPC	8
Easton	22020	Grafton	009	NCC	1
Eaton	23380	Carroll	003	NCC	1
Effingham	23620	Carroll	003	LRPC	2
Ellsworth	23860	Grafton	009	NCC	1
Enfield	24340	Grafton	009	UVLSRPC	3
Epping	24660	Rockingham	015	RPC	8
Epsom	24900	Merrimack	013	CNHRPC	5
Errol	25140	Coos	007	NCC	1
Ervings Location	25180	Coos	007	NCC	1
Exeter	25380	Rockingham	015	RPC	8
Farmington	26020	Strafford	017	SRPC	9
Fitzwilliam	26500	Cheshire	005	SWRPC	4
Francestown	27140	Hillsborough	011	SWRPC	4
Franconia	27300	Grafton	009	NCC	1
Franklin	27380	Merrimack	013	LRPC	2
Freedom	27700	Carroll	003	LRPC	2
Fremont	27940	Rockingham	015	RPC	8
Gilford	28740	Belknap	001	LRPC	2
Gilmanton	28980	Belknap	001	LRPC	2
Gilsum	29220	Cheshire	005	SWRPC	4
Goffstown	29860	Hillsborough	011	SNHPC	6

TOWN	CENSUS TOWN FIPS	COUNTY	COUNTY FIPS	RPC NAME	RPC CODE
Gorham	30260	Coos	007	NCC	1
Goshen	30500	Sullivan	019	UVLSRPC	3
Grafton	30820	Grafton	009	UVLSRPC	3
Grantham	31220	Sullivan	019	UVLSRPC	3
Greenfield	31540	Hillsborough	011	SWRPC	4
Greenland	31700	Rockingham	015	RPC	8
Greens Grant	31780	Coos	007	NCC	1
Greenville	31940	Hillsborough	011	SWRPC	4
Groton	32180	Grafton	009	NCC	1
Hadleys Purchase	32420	Coos	007	NCC	1
Hales Location	32500	Carroll	003	NCC	1
Hampstead	32900	Rockingham	015	RPC	8
Hampton	33060	Rockingham	015	RPC	8
Hampton Falls	33460	Rockingham	015	RPC	8
Hancock	33700	Hillsborough	011	SWRPC	4
Hanover	33860	Grafton	009	UVLSRPC	3
Harrisville	34420	Cheshire	005	SWRPC	4
Hart's Location	34500	Carroll	003	NCC	1
Haverhill	34820	Grafton	009	NCC	1
Hebron	35220	Grafton	009	LRPC	2
Henniker	35540	Merrimack	013	CNHRPC	5
Hill	35860	Merrimack	013	LRPC	2
Hillsborough	36180	Hillsborough	011	CNHRPC	5
Hinsdale	36660	Cheshire	005	SWRPC	4
Holderness	36900	Grafton	009	LRPC	2
Hollis	37140	Hillsborough	011	NRPC	7
Hooksett	37300	Merrimack	013	SNHPC	6
Hopkinton	37540	Merrimack	013	CNHRPC	5
Hudson	37940	Hillsborough	011	NRPC	7
Jackson	38260	Carroll	003	NCC	1
Jaffrey	38500	Cheshire	005	SWRPC	4
Jefferson	38820	Coos	007	NCC	1
Keene	39300	Cheshire	005	SWRPC	4
Kensington	39780	Rockingham	015	RPC	8
Kilkenny	39940	Coos	007	NCC	1
Kingston	40100	Rockingham	015	RPC	8
Laconia	40180	Belknap	001	LRPC	2
Lancaster	40420	Coos	007	NCC	1
Landaff	40660	Grafton	009	NCC	1
Langdon	40900	Sullivan	019	SWRPC	4
Lebanon	41300	Grafton	009	UVLSRPC	3
Lee	41460	Strafford	017	SRPC	9
Lempster	41700	Sullivan	019	UVLSRPC	3
Lincoln	41860	Grafton	009	NCC	1
Lisbon	42020	Grafton	009	NCC	1
Litchfield	42260	Hillsborough	011	NRPC	7
Littleton	42580	Grafton	009	NCC	1
Livermore	42820	Grafton	009	NCC	1

TOWN	CENSUS TOWN FIPS	COUNTY	COUNTY FIPS	RPC NAME	RPC CODE
Londonderry	43220	Rockingham	015	SNHPC	6
Loudon	43380	Merrimack	013	CNHRPC	5
Low & Burbanks	43620	Coos	007	NCC	1
Lyman	44100	Grafton	009	NCC	1
Lyme	44260	Grafton	009	UVLSRPC	3
Lyndeborough	44580	Hillsborough	011	NRPC	7
Madbury	44820	Strafford	017	SRPC	9
Madison	45060	Carroll	003	NCC	1
Manchester	45140	Hillsborough	011	SNHPC	6
Marlborough	45460	Cheshire	005	SWRPC	4
Marlow	45700	Cheshire	005	SWRPC	4
Martins Location	46020	Coos	007	NCC	1
Mason	46260	Hillsborough	011	NRPC	7
Meredith	47140	Belknap	001	LRPC	2
Merrimack	47540	Hillsborough	011	NRPC	7
Middleton	47700	Strafford	017	SRPC	9
Milan	47860	Coos	007	NCC	1
Milford	48020	Hillsborough	011	NRPC	7
Millsfield	48260	Coos	007	NCC	1
Milton	48660	Strafford	017	SRPC	9
Monroe	48980	Grafton	009	NCC	1
Mont Vernon	49140	Hillsborough	011	NRPC	7
Moultonborough	49380	Carroll	003	LRPC	2
Nashua	50260	Hillsborough	011	NRPC	7
Nelson	50580	Cheshire	005	SWRPC	4
New Boston	50740	Hillsborough	011	SNHPC	6
New Castle	50980	Rockingham	015	RPC	8
New Durham	51220	Strafford	017	SRPC	9
New Hampton	51540	Belknap	001	LRPC	2
New Ipswich	51940	Hillsborough	011	SWRPC	4
New London	52100	Merrimack	013	UVLSRPC	3
Newbury	50900	Merrimack	013	UVLSRPC	3
Newfields	51380	Rockingham	015	RPC	8
Newington	51620	Rockingham	015	RPC	8
Newmarket	52340	Rockingham	015	SRPC	9
Newport	52580	Sullivan	019	UVLSRPC	3
Newton	52900	Rockingham	015	RPC	8
North Hampton	54580	Rockingham	015	RPC	8
Northfield	54260	Merrimack	013	LRPC	2
Northumberland	56100	Coos	007	NCC	1
Northwood	56820	Rockingham	015	SRPC	9
Nottingham	57460	Rockingham	015	SRPC	9
Odell	57860	Coos	007	NCC	1
Orange	58340	Grafton	009	UVLSRPC	3
Orford	58500	Grafton	009	UVLSRPC	3
Ossipee	58740	Carroll	003	LRPC	2
Pelham	59940	Hillsborough	011	NRPC	7
Pembroke	60020	Merrimack	013	CNHRPC	5
Peterborough	60580	Hillsborough	011	SWRPC	4

TOWN	CENSUS TOWN FIPS	COUNTY	COUNTY FIPS	RPC NAME	RPC CODE
Piermont	61060	Grafton	009	UVLSRPC	3
Pinkham's Grant	61620	Coos	007	NCC	1
Pittsburg	61780	Coos	007	NCC	1
Pittsfield	61940	Merrimack	013	CNHRPC	5
Plainfield	62340	Sullivan	019	UVLSRPC	3
Plaistow	62500	Rockingham	015	RPC	8
Plymouth	62660	Grafton	009	NCC	1
Portsmouth	62900	Rockingham	015	RPC	8
Randolph	63860	Coos	007	NCC	1
Raymond	64020	Rockingham	015	SNHPC	6
Richmond	64420	Cheshire	005	SWRPC	4
Rindge	64580	Cheshire	005	SWRPC	4
Rochester	65140	Strafford	017	SRPC	9
Rollinsford	65540	Strafford	017	SRPC	9
Roxbury	65700	Cheshire	005	SWRPC	4
Rumney	65940	Grafton	009	NCC	1
Rye	66180	Rockingham	015	RPC	8
Salem	66660	Rockingham	015	RPC	8
Salisbury	66980	Merrimack	013	CNHRPC	5
Sanbornton	67300	Belknap	001	LRPC	2
Sandown	67620	Rockingham	015	RPC	8
Sandwich	67780	Carroll	003	LRPC	2
Sargents Purchase	67860	Coos	007	NCC	1
Seabrook	68260	Rockingham	015	RPC	8
Second College Grant	68500	Coos	007	NCC	1
Sharon	68820	Hillsborough	011	SWRPC	4
Shelburne	68980	Coos	007	NCC	1
Somersworth	69940	Strafford	017	SRPC	9
South Hampton	71140	Rockingham	015	RPC	8
Springfield	72740	Sullivan	019	UVLSRPC	3
Stark	73060	Coos	007	NCC	1
Stewartstown	73380	Coos	007	NCC	1
Stoddard	73700	Cheshire	005	SWRPC	4
Strafford	73860	Strafford	017	SRPC	9
Stratford	74180	Coos	007	NCC	1
Stratham	74340	Rockingham	015	RPC	8
Success	74500	Coos	007	NCC	1
Sugar Hill	74740	Grafton	009	NCC	1
Sullivan	74900	Cheshire	005	SWRPC	4
Sunapee	75060	Sullivan	019	UVLSRPC	3
Surry	75300	Cheshire	005	SWRPC	4
Sutton	75460	Merrimack	013	CNHRPC	5
Swanzey	75700	Cheshire	005	SWRPC	4
Tamworth	76100	Carroll	003	LRPC	2
Temple	76260	Hillsborough	011	SWRPC	4
Thompson & Meserve	76580	Coos	007	NCC	1
Thornton	76740	Grafton	009	NCC	1

TOWN	CENSUS TOWN FIPS	COUNTY	COUNTY FIPS	RPC NAME	RPC CODE
Tilton	77060	Belknap	001	LRPC	2
Troy	77380	Cheshire	005	SWRPC	4
Tuftonboro	77620	Carroll	003	LRPC	2
Unity	77940	Sullivan	019	UVLSRPC	3
Wakefield	78180	Carroll	003	SRPC	9
Walpole	78420	Cheshire	005	SWRPC	4
Warner	78580	Merrimack	013	CNHRPC	5
Warren	78740	Grafton	009	NCC	1
Washington	78980	Sullivan	019	UVLSRPC	3
Waterville Valley	79380	Grafton	009	NCC	1
Weare	79780	Hillsborough	011	SNHPC	6
Webster	80020	Merrimack	013	CNHRPC	5
Wentworth	80500	Grafton	009	NCC	1
Wentworths Location	80740	Coos	007	NCC	1
Westmoreland	82660	Cheshire	005	SWRPC	4
Whitefield	84420	Coos	007	NCC	1
Wilmot	84900	Merrimack	013	UVLSRPC	3
Wilton	85220	Hillsborough	011	NRPC	7
Winchester	85540	Cheshire	005	SWRPC	4
Windham	85780	Rockingham	015	SNHPC	6
Windsor	85940	Hillsborough	011	SWRPC	4
Wolfeboro	86420	Carroll	003	LRPC	2
Woodstock	87060	Grafton	009	NCC	1

Appendix II. Regional Planning Commissions

Region 1: North Country Council
Bethlehem, NH
Jeff Hayes, Executive Director
www.nccouncil.org

Region 2: Lakes Region Planning Commission
Meredith, NH
Kimon Koulet, Executive Director
www.lakesrpc.org

Region 3: Upper Valley Lake Sunapee
Lebanon, NH
Christine Walker, Executive Director
www.uvlsrpc.org

Region 4: Southwest Region Planning Commission
Keene, NH
Tim Murphy, Executive Director
www.swrpc.org

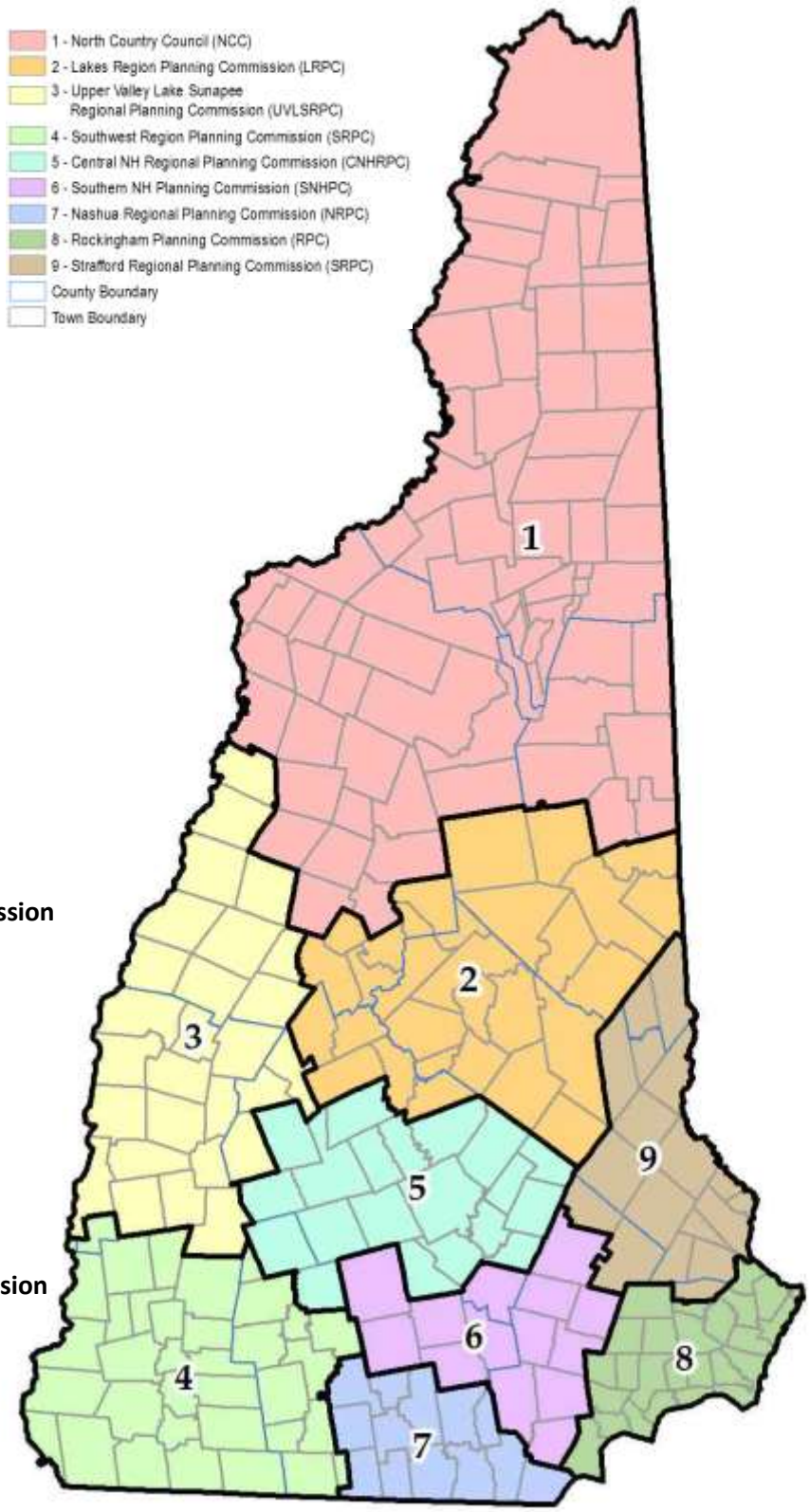
Region 5: Central NH Regional Planning Commission
Concord, NH
Michael Tardiff, Executive Director
www.cnhrpc.org

Region 6: Southern NH Planning Commission
Manchester, NH
David Preece, Executive Director
www.snhpc.org

Region 7: Nashua Regional Planning Commission
Merrimack, NH
Kerrie Diers, Executive Director
www.nashuarpc.org

Region 8: Rockingham Planning Commission
Exeter, NH
Cliff Sinnott, Executive Director
www.rpc-nh.org

Region 9: Strafford Regional Planning Commission
Rochester, NH
Cynthia Copeland, Executive Director
www.strafford.org



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