

Jennifer Czysz, Assistant Director, Nashua RPC



Residents of New Hampshire shared their vision for the future of the state during the **Granite State Future Project**

over the course of



Thoughts, ideas and opinions were provided through:



All 9 Regional Planning Commissions Contributed Research & Data...

North Country Council Bethlehem, NH

Lakes Region Planning Commission Meredith, NH

Upper Valley Lake Sunapee RPC Lebanon, NH

Southwest Region Planning Comm. Keene, NH

Central NH Regional Planning Commission Concord, NH

Southern NH Planning Commission Manchester, NH

Nashua Regional Planning Commission Merrimack, NH

Rockingham Planning Commission Exeter, NH

Strafford Regional Planning Commission Rochester, NH



...In Partnership With Many Other Organizations Around the State.



Connections

Linking Local, Regional, and State Planning

State Development Plan RSA 9-A

> Plan RSA 9-A

Regional Planning RSA 36:47

RSA 36:47

Local Master Plan RSA 674:2

RSA 674:2

The Livability Principles



Regional Planning Process



What We Created

Statewide > Research

- Collaborative
 Outreach
- Regional Plan
 Framework
- Existing Conditions & Trends Assessment
- Climate Change Studies

Common > Metrics Climate Change in Northern New Hampshire PAST, PRESENT, AND FUTURE







< Regional Plans



The Statewide Snapshot

Residents of New Hampshire from every corner of the state shared their uision for the future of the state during the Granite State Future Project.

Impassioned thoughts, ideas and opinions were provided through discussion, online surveys, and paper submission. The vision they shared is reflected in a suite of documents culminating in *The Statewide Snapshot*, an integrated review of local and regional planning priorities across New Hampshire.

The Granite State Future Project represents a three year effort to look, listen and gain insight into the part, present and fature of New Hampshire and the people who like and work here. The ofgenesism in this document gives an overview of the thereas, issuer, concerns and ideas that were reformed repeatedly throughout the three-year project.

< Statewide Snapshot – The Final Results

Collaborative Outreach

www.granitestatefuture.org

new hampshire

What's Your Future Vision?

GRANITE STATE

Wantsto Hear From You!

Whatte your

France Vision

iranite State Future



TAG CLOUD

<u>Community</u> <u>and</u> <u>Economic</u> <u>Vitality</u> <u>UVLSRPC RPC MRPC Grants</u>

Planning

 Arts
 Broadband
 LRPC
 SWRPC

 Capital Improvement Program
 SNHPC

 Partners
 Environment
 FAQ

 Permaculture
 Permaculture

 NH Housing
 Agriculture

 Opportunities
 Hazard Mitigation
 Climate

 Outreach
 Implementation

 Health
 NCC



Regional Plan Framework

Interrelationship of the Regional Plan Components and the NH Livability Principles	NH Livability Principles	Compact Development Patterns	Housing Choices	Transportation Choices	Natural Resource Functions and Quality	Community and Economic Vitality	Climate Change and Energy Efficiency	Creating OpportunityEquity & Engagement
Housing								
Regional Transportation Plan								
Water Infrastructure Plan								
Environmental Plan								
Economic Development Plan								
Comprehensive Climate Change Impacts								
Energy Efficiency and Green Building Strategy								
Scenario Planning								

Degree of Interrelationships Key



Existing Conditions and Trends Assessment



Climate Change Studies

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Climate Change in Southern New Hampshire PAST, PRESENT, AND FUTURE

A PUBLICATION OF THE SUSTAINABILITY INSTITUTE AT THE UNIVERSITY OF NEW HAMPSHIRE







Common Planning Metrics

Data Downloads:

- Demographics
- Land Use
- Housing
- Transportation
- Water Infrastructure
- Environment
- Economic Development
- Climate and Energy



Nine Regional Plans









GRANITE STATE Success Stories













What We Have Learned

Common Themes

Several common themes emerged that wove through all plans, chapters and connected each of the NH Livability Principles



Statewide Issues & Trends
 Sectored Commonalities & Distinction

- Regional Commonalities & Distinctions
 - Future Opportunities for Action

Traditional Settlement Patterns...



Of New Hampshire residents say promoting local agriculture should be actively encouaged.



Housing Choice



Of New Hampshire residents think future development should occur in areas already developed.



Transportation Choice





Overwhelmingly view maintaining the state's bridges and highways as the top priority for transportation funding.



Community & Economic Vitality...

OPEN ^{for~} BUSINESS

1.9 101



Place a High Priority on Nearby Job Opportunities



Natural Resources Functions & Quality









Climate Change & Energy Efficiency

\$5.9 Billion Billion

Spent on Energy in 2013

TUT

Taking Action... Where Do We Go From Here?



Thank You.

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Planning for Sustainability: Support for New York Municipalities

Climate Smart Communities, Cleaner Greener Communities, and Clean Energy Communities

Dazzle Ekblad Office of Climate Change NYS Department of Environmental Conservation

Timeline – Community Sustainability Programs

- 2009 present: <u>Climate Smart Communities</u>
 - Interagency effort: 6 state sponsors (primary = DEC)
- 2011 Mar. 2016: <u>Cleaner Greener Communities</u>
 - New York State Energy Research and Development Authority (NYSERDA)
- 2016 (soon) TBD: <u>Clean Energy Communities</u>





Department of Environmental Conservation



Support for Local Climate Action



One of the few programs where local gov'ts can find:

- Free technical support on energy and climate issues
- > Tools, guides, webinars, and case studies

Assistance for each community to define their best strategies for:

- Reducing emissions
- Cutting costs of energy use
- Building resiliency in the face of climate change



Department of Environmental Conservation

What have Climate Smart Communities done?

- Climate and energy planning
 - 89 Climate Action Plans
 - 112 Community GHG Inventories
 - 85 Government Ops GHG Inventories
- Energy and transportation initiatives
 - 17 Solarize campaigns
 - Clean fleet policies
 - Right-sizing
- Vulnerability assessments
- Adaptation planning



Where are the Climate Smart Communities?



Since 2009:

- 177 registered communities
- 7 certified communities
- One-third of New Yorkers (6.6 M)
- Smallest: V. of Van Etten (537)
- Largest: Suffolk County (1.5 M)

Full List of CSCs: http://www.dec.ny.gov/energy/56876.html



Department of Environmental Conservation

<u>Registered</u> vs. <u>Certified</u> Climate Smart Community

- Registered = making a commitment
 - Local gov't passes a formal municipal resolution adopting the 10-point CSC Pledge
- Certified = leaders who've made concrete progress
 - Accumulate points through documented actions to achieve Certified, Bronze, Silver or Gold levels
 - 1-10 points per action, 138 total possible actions
 - Range of action types: planning, policies, outreach, implementation, etc.





Certification Priority Actions

- Pass a resolution adopting the **CSC Pledge** 1.1
- Create a community CSC task force focused on climate mitigation & adaptation 1.2
- Appoint a CSC coordinator 1.3
- Create an internal green team focused on climate mitigation & adaptation 1.4
- Develop a government operations **GHG emissions inventory** 2.1
- Develop a community **GHG emissions inventory** 2.2
- Establish a government operations emissions reduction target 2.3
- Establish a community **emissions reduction target** 2.4
- Develop a government operations climate action plan 2.5
- Develop a community climate action plan 2.6
- Conduct energy audits of local government buildings 3.1
- Conduct a vulnerability assessment 7.1
- 7.3 Review existing community plans & projects to identify **climate adaptation** strategies & policies or projects that may decrease vulnerability



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OPPORTUNIT



Department of

Environmental

Conservation

Communities

Certified

NEW YORK

OPPORTUNITY

STATE OF

New for 2016: <u>CSC Grants</u>

- Only municipalities are eligible (counties, cities, towns, villages)
- Required local match is **50%** of eligible project costs
- \$11 million for two major project categories:
 - 1) \$10.5 million for *Climate Protection* <u>Implementation</u> Projects
 - Construction of natural resiliency measures, reduction of flood risk, etc.
 - Reduction of GHGs: alternatives to driving or recycling of food waste
 - 2) \$500,000 for *Climate Smart Communities* <u>Certification</u> Projects



Cleaner Greener Communities

- 2011-2016: administered by NYSERDA
- Goals: Establish sustainable land use policies
 - Guide infrastructure investment
 - Promote sustainable growth
- Phase I \$10 M for 10 Regional Sustainability Plans
 - Planning teams led by a municipality
 - Assessed current greenhouse gas emissions and energy use
 - Assessed available natural resources and economic assets, liabilities, and opportunities

Cleaner Greener Southern Tier

Regional Sustainability Plan

For Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tioga and Tompkins Counties, New York



STATE OF

PPORTUNITY

Environmental

Conservation

Cleaner Greener Communities

• Phase I - Regional Sustainability Plans (cont.)

- Set targets for energy supplies, transportation, waste and water mgmt., land use, housing, agriculture, economic development, and open space
- Developed a plan outlining the short- and long-term actions the region can take to achieve targets and goals
- Phase II <u>\$90M in Smart Growth Grants</u>
 - Most for large-scale implementation projects
 - E.g., bus rapid transit, digester, and mixed-use, LEED-ND-type developments
 - Also grants for, e.g., integrating sustainability into comprehensive plans, streamlined EV and PV permitting





Department of Environmental Conservation

Relationship between Climate Smart Communities (CSC) and Clean Energy Communities (CEC)

Climate Smart Communities

- Comprehensive climate program
- 138 unique certification actions
- Accumulate points toward certification
- Grants available for select actions

Clean Energy Communities

- Focused on clean energy
- 10 High-Impact Actions
- Complete 4 actions to be designated
- Designated = gain access grant funding
- Complementary programs
- Most CEC actions correspond w/ CSC certification actions




Clean Energy Communities Program

An open enrollment program that provides **rewards and recognition** to local governments that demonstrate clean energy leadership

- **STEP 1: BECOME A CLEAN ENERGY COMMUNITY** by completing four out of ten highimpact actions designed to save money, foster a vibrant economy, and improve the environment. One action must be completed after June 1, 2016.
- **STEP 2: ACCESS GRANT FUNDING** with no local cost share to support additional clean energy projects.

Dedicated and knowledgeable local coordinators are available to assist communities as they implement high-impact actions including free on-demand technical support, step-by-step guidance, case studies, model ordinances, RFPs, etc.



Clean Energy Communities: 10 High-Impact Actions

- 1) Benchmarking
- 2) Clean Energy Upgrades
- 3) LED Street Lights
- 4) Clean Fleets
- 5) Solarize
- 6) Unified Solar Permit
- 7) Energy Code Enforcement Training
- 8) Climate Smart Communities Certification
- 9) Community Choice Aggregation
- 10) PACE Financing





Thank You!

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Department of Environmental Conservation

MA Sustainability Programs – Local View

Alicia Hunt City of Medford, MA Director, Energy & Environment June 24, 2016



GO GREEN Medford

City of Medford, MA

- Population 56,000
- 8.6 square miles
- 5 miles north of Boston
- Extremely dense population with 1/3 green space
- Socio-economically diverse
- Mayor & City Council
- Tufts University
- 4th English Settlement in North America, 1630



GO GREEN Medford

Medford Sustainability Highlights

- 1999:
 - 1st Green House Gas Inventory
 - Created Energy Task Force
 - Solar panels on school & City Hall
- 2001:
 - 1st Municipal Climate Action Plan in MA
- 2003:
 - Creation of Energy & Environment Office
- 2004:
 - Created Clean Energy Committee



Medford Sustainability Highlights

- 2009:
 - Federal EECBG grant energy efficient measures in schools & hired Energy Efficiency Coordinator in 2010
 - Commissioned 100kW wind turbine at school complex fully grant funded
 - Municipal building energy audits through MA DOER
- 2010:
 - Clean Energy Committee reconstitute as Medford Energy Committee
 - Green Communities Designation and Grant
- 2012:
 - Created Local Energy Action Plan with regional planning grant

GO GREEN Medford

Medford Sustainability Highlights

- 2014
 - Federal Urban Waters Grant stormwater outreach & education
 - Resiliency Technical Assistance and Implementation Grants MA DOER solar and battery storage at key buildings
- 2015
 - Boston Metro Mayors Resiliency Task Force
 - UN Compact of Mayors commitment
- 2016
 - Began working on vulnerability assessment



MA Green Communities Act

- Green Communities Act in 2008 provides innovation for energy efficiency programs and investment in renewables; created the Green Communities Division in DOER
- **4 Regional Coordinators** know their communities well
- Created Green Communities Designation and Grant Program
- Implementation of the Regional Greenhouse Gas Initiative (RGGI)



Green Communities Program

- Qualification Criteria Designation
- 1. Adopt as-of-right siting for RE/AE generation, RE/AE R&D, or RE/AE manufacturing
- 2. Adopt expedited permitting process
- 3. Create an Energy Reduction Plan to reduce energy use by 20% in 5 years
- 4. Purchase only fuel-efficient vehicles
- 5. Minimize life energy cycle cost in new construction → adopt the Stretch Code

• Grant Funding

- 1. Energy Efficiency Projects
- 2. Renewable Energy Projects on municipal land



Green Community Program in Action

- Grants for Energy Efficiency projects hot water heater upgrades, oil to gas heating system conversion, upgrades to indoor and outdoor LED lighting, weatherization
- New construction is steadily getting more energy efficient
- New vehicle purchases are energy efficient
- Measuring municipal energy use need to measure to reduce.

 Mass Energy Insight – collects & presents energy data in graphs and tables

GO GREEN Medford

Regional Support - MAPC

- 12 Regional planning agencies Metropolitan Area Planning Council
- Staff expertise on sustainability topics
- MAPC Clean Energy, Environment, Collective Purchasing, District Local Technical Assistance, Regional Coalitions
- Consulting support for Local Energy Action Plan (LEAP)
- Metro Mayors Regional Coalition extensive support on sustainability, climate vulnerabilities & resiliency planning



GO GREEN Medford

Community Clean Energy Resiliency Initiative

- \$40M grant program started in 2014
- Goal to provide off-grid capabilities for critical infrastructure
- e.g. Solar with battery storage or microgrid
- Municipalities requested additional technical help to apply
- Grant amounts were formula based
- 27 Communities requested & received free technical assistance in the fall of 2014.



Community Clean Energy Resiliency Initiative

- Medford received grant of \$833,000 end of December 2014
- Solar with battery storage at 2 locations
- Based on technical assistance report
- Entire year of 2015 reviewing contract with state
- State hired more technical assistance for implementation awardees
- Next step: hire consultant for feasibility study



GO GREEN Medford

Coastal Resilience Grant Program

- MA Office of Coastal Zone Management
- 78 eligible municipalities
- 5 eligible areas:
 - Vulnerability & Risk Assessment
 - Public Education & Communication
 - Plans, Bylaws, ordinances, standards changes
 - Engineering redesigns and retrofit for facilities & infrastructure
 - Green infrastructure coastal protection
- Grants \$60,000-\$300,000



Closing Thoughts

- Needs departments to work together Planners, Engineers, Sustainability Directors
- Needs communities to work as regions more and more great examples
- Urban Sustainability Directors Network as source
- Association of Climate Change Officers

GO GREEN Medford



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Sustainable Jersey Donna Drewes Co-Director, Sustainable Jersey & Sustainability Institute The College of New Jersey



What kind of future do we want?



Students help the Mount Holly Green Team create a rain garden



Components of Sustainability



PEOPLE PLANET

PROSPERITY



What is Sustainable Jersey?

Sustainable Jersey coordinates priorities, resources, and policy among public and private, state and local actors to help communities achieve their sustainability goals. Capped by prestigious certification, the program has three components.

Sustainable Jersey:

- Identifies actions to help municipalities and schools become more sustainable
- Provides tools, resources, and guidance to make progress
- Provides access to grants and funding for municipalities and schools

Sustainable Jersey Communities



New Jersey Government

566 Municipal Governments

- Land Use Planning and Zoning
- •Development
- •Public Health and Safety
- Education
- Solid Waste and Recycling
- Water and Wastewater
- Anything Not Preempted by State and Federal

Local Governments Vary Greatly •Population Size: 275,000 to <100 •Dense Urban to Rural •Capacity: Sophisticated Professional Government to 1 Parttime Employee



Participating Communities



- Program launch: February 2009
- 437(78%) NJ municipalities participating
- 88% of NJ's population lives in these communities
- In 2015- 193 municipalities certified:
 - 160 towns at bronze level
 - 33 towns at silver level
- June 2016 111municipalities applied for certification (26 new)



Certification Steps

- 1. Pass a resolution; register municipality online
- 2. Form Green Team
- 3. Implement actions to score 150/350 points
- 4. Submit documentary evidence for each action
- 5. Certification awarded after review and verification



Green Teams



- Mandatory program action
- Formally established by municipality or school to guide certification efforts
- Hundreds of Green Teams formed throughout the State, thousands of Green Team members
- Revolutionary model of community directed leadership for sustainability



Actions: Prosperity, Planet, People

ENERGY EFFICIENCY Energy Audits for Municipal Facilities* High Efficiency Municipal Buildings			POINTS	
			20-50	
			10-20	
FOOD		GREEN DESIGN		POINTS
Farmland Preservation	2	Green Building Policy/	Resolution	5
Food Production	4	Green Building Training		5
Planning for Local Food		Green Design Commen	cial and Residential Buildings	5-20
Support Local Food	0	Green Design Municip	al Buildings	10-20
LOCAL ECONOMIES		GREENHOUSE GAS		
Buy Local Programs		Municipal Carbon Foo	tprint*	10
Green Business Recogr		Community Carbon Fo	ootprint	10
Green Jobs/Economic I		Climate Action Plan		10
OPERATIONS AND MA		Wind Ordinance		10
Green Fleets*		INNOVATIVE DEMONS	STRATION PROJECTS	
Adopt Behavioral Polici		Geothermal		10
Green Purchasing Prog		Green Roofs		10
Grounds and Maintena		Raingardens		10
		Solar		10
ARTS/CULTURE/HISTC		Wind		10
Historic Preservation		Other		10
Strengthening School A		LAND USE & TRANSP	ORTATION	
COMMUNITY PARTNER		Sustainable Land Use	Pledge*	10
		Complete Streets Prog	jram	20
Create Green Team*		Municipal Planning &	Zoning Self-Assessment	10
Community Education		Sustainability Master I	Plan Revision	20
Energy Outreach and In Education for Sustainal		NATURAL RESOURCE	S	
School-Based Energy C		Natural Resource Inve	ntory*	20
Sonoor-Dased Energy C		Water Conservation O	rdinance*	20
		Conservation Easemen	nts	10-15
		Environmental Commi	ission	10

PEOPLE

- Participants choose from the menu of 100+ actions to accumulate the required points
- Actions created by 23 issuebased Task Forces
- 12 Priority Actions:
 - Energy Tracking & Management
 - Inventory & Upgrade All Buildings
 - Green Business Recognition Program
 - Fleet Inventory
 - Climate Adaptation: Flooding Risk
 - Municipal Carbon Footprint
 - Sustainable Land Use Pledge
 - Natural Resource Inventory
 - Prescription Drug Safety and Disposal
 - Diversity on Boards & Commissions



Actions

- Concrete steps municipalities can implement to become certified and more sustainable; actions include:
 - Ordinances
 - Programs and Plans
 - Policies and procedures
 - Retrofit or renovation of facilities



Certification Requirements



- Total of at least 150 points
- Mandatory Green Team
- Implement 2 of 11 priority actions
- Actions completed in 6 of 19 categories

- Total of at least 350 points
- Mandatory Green Team
- Implement 3 of 11 priority actions
- Actions completed in 8 of 19 categories



http://www.sustainablejersey.com/actions-certification/certification-overview/

Tools, Training and Guidance

Who to Involve Timeframe **Project Costs** Why Important What to Do Submission Requirements Spotlight

Resources

- Each "action" comes with a detailed tool and step by step "how to" directions
- Access to free Sustainable Jersey workshops, trainings, webinars and resource center (CEUs provided)
- Training sessions showcase successful municipalities



Certification Benefits

- Save money. Get money.
 - Implement actions that lead to cost savings (energy, water, garbage bills)
 - Improve efficiency, cut waste, stimulate local economy
 - Access to incentives and grants
- Gain access to training, tools and expert guidance.
- Get recognized. Promote your town.
- Conserve valuable resources. Protect the environment.



Small Grants Program



Since 2009 Sustainable Jersey has awarded 433+ grants ranging from \$1,000 capacity building grants to \$35,000 project grants. By April 2016, over \$**2,663,000** will have been awarded.

Funding Provided By:

PSEG Foundation



- New Jersey Department of Health
- Gardinier Environmental Fund
- New Jersey Education Association



Planning Focus Areas

• Land Use Planning and Transportation

- Complete Streets
- Bike/Pedestrian Plans
- TOD
- Overarching Sustainability Plans
- Green Building and Environmental Sustainability Master Plan Element
- Health In All Policies
- Farmland Preservation and Open Space Plans

Economic Development

- Creative Placemaking Plans
- Community Asset Mapping

Green House Gas

- Climate Action Plans
- Energy Master Plans
- Municipal Carbon Footprints





Resiliency Program

"To help municipalities strengthen their resiliency to the impacts of climate change."

- Research and Analysis
- Develop New Tools, Resources and Standards
- Outreach and Education
- Municipal Technical Assistance
- Monitor and Track Municipal Progress
- Network and Collaboration with Partners







Resiliency Program

Program Highlights

- Partnered with NJDEP, the National Wildlife Federation, Stevens Institute of Technology and others to assist communities with natural and nature-based strategies to mitigate flooding.
- Led state efforts in the development of the Coastal Vulnerability Assessment, a new tool for NJ municipalities (and upcoming action)
- Climate Adaptation-Flooding Risks resiliency and adaptation planning process with a flood visualization tool
- Supported development of a new program of resiliency actions.



Building the Movement

National Network of Statewide Local Sustainability Programs

Report -- Statewide Change, One Community at a Time: A Comparative Study of Collaborative State-Local Sustainability Programs

Overview of 12 state wide based energy or sustainability programs.
To view the Statewide Sustainability Report, visit http://bit.ly/StatewideChange.

Programs/States include:

Minnesota GreenStep Cities, Sustainable Maryland, Sustainable Pennsylvania, Wisconsin Green Tier Legacy Communities and Sustainable Jersey, Green Cities-California, Clean Energy Communities (CT), the Florida Green Building Coalition, Massachusetts Green Communities, Michigan Green Communities, Climate Smart Communities (NY) and Go Green Virginia

Exploring the creation of a national network of certification/rating programs that operate on a statewide level.



Building the Movement

Local Government Participation

National Network Report

orrow, One Com



Presenters

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