

**Recommendations for the Institute for Sustainable Communities'  
Community Climate Leadership Academy Curriculum**

**Dan Chow  
Ben Estabrook  
Andres Gonzalez-Stewart  
Chris Hassig  
Jake Liberman  
Zoë Sheldon**

**Middlebury College  
Environmental Studies Senior Seminar**

**May 2009**

**Table of Contents**

**Introduction to the Community Climate Leadership Academy (CCLA).....** 2

**Methods.....** 2

**Part 1. Community Surveys.....** 4

    Interview Summaries by City..... 6

    Summary of Recommendations from Interviews..... 12

**Part 2. Climate Action Inventory: Organizations, Tools and Resources.....** 13

    Smart Growth..... 13

    Residential Energy Efficiency..... 16

**Part 3. Climate Action Inventory: Summary Tables.....** 19

**Appendices.....** 25

    A. Hand Energy Interview..... 25

    B. Interview Questions..... 26

    C. Focus Cities..... 27

**Acknowledgements.....** 28

## Introduction to the Community Climate Leadership Academy

An integral component of the Middlebury College Environmental Studies Senior Seminar learning process is a community partner project that connects ideas discussed in the classroom to real-world initiatives. Our group joined forces with the Institute for Sustainable Communities (ISC), a Montpelier, VT-based organization whose goal, broadly defined, is to help communities achieve their sustainability goals. We were asked to contribute to the development of a curriculum for the ISC's Community Climate Leadership Academy (CCLA). As defined by ISC, the CCLA is:

“A state-of-the-art training, technical assistance and mentoring program on community-based climate solutions. Its fundamental and singular purpose is to build the capacity of communities to take effective local action to increase energy efficiency, reduce climate pollution, create green businesses and jobs, and strengthen their resilience to the local impacts of climate disruption. The CCLA will help bridge the growing gap between willingness and capacity to act at the local level, by facilitating peer-to-peer mentoring and providing cities with easier access to the best available tools, resources, and practices.”

Our specific task was to research and compile information on current initiatives dealing with residential energy efficiency. Because of personal interest, we also intended to research and include information on smart growth initiatives.

### Methods

As a group, we decided that in order to provide adequate recommendations for the CCLA, we first needed to learn about current residential energy efficiency initiatives in cities across the U.S. Based on an extensive list provided by the ISC, we selected 30 cities with some experience in sustainability to contact about their initiatives promoting residential energy efficiency and smart growth. We attempted to include a wide range of population sizes, geographic locations, and levels of affluence in order to increase the potential transferability of best practices among diverse communities; however, the majority of listed cities fell on the more affluent end of the income spectrum. See **Focus Cities** (Appendix C) for the final list.

Each group member was made responsible for researching (finding information on current initiatives) and contacting five cities. We then drafted a series of questions pertaining to community initiatives in the areas of residential energy efficiency and smart growth, which we edited with input from Elaine Wang, our liaison at ISC. We sent these questions to participating cities before beginning our phone interviews as a way to foster insightful and relevant discussion (see **Interview Questions** – Appendix B).

Initiating contact with sustainability offices was more difficult than expected. Significant time was invested in tracking down specific contacts, since there is little consistency in municipal organization between towns. We found that established sustainability programs took a variety of forms, including municipal offices or bureaus of sustainability, private citizen groups, and partnerships between the two. Drafting an introductory contact e-mail was also time-consuming, as communicating the legitimacy of our project and the emphasizing the importance of participation is crucial moving forward. Of the 30 original cities, we thoroughly interviewed 8: Atlanta, GA; Austin, TX; Boston, MA; Burlington, VT; Carbondale, CO; Red Hook, NY; Middlebury, VT; and Pocatello, ID.

Two group members were present for most interviews, one each from the energy efficiency and smart growth focus groups. As interviews progressed, we realized that obtaining information on smart growth from sustainability program directors was problematic because they were largely unconnected with planning and development programs in their cities. The implications of this finding will be discussed further within our recommendations and discussion. The majority of our recommendations therefore pertain exclusively to initiatives dealing with residential energy efficiency.

## **Part 1: Community Surveys**

Our interviews yielded an interesting picture of the diversity of community sustainability initiatives being developed and implemented across the country. Several emergent themes should help guide the development of the CCLA curriculum:

### **Themes**

- (1) Use of municipal entities as models (cited by: Pocatello, ID, Salt Lake City, UT, Middlebury, VT, Boston, MA)
- (2) Need for programs to educate people about implementing sustainable technology – solar panels, insulating houses, etc. (cited by: Pocatello, ID, Red Hook, NY)
- (3) Necessity of partnerships between “organizers” (sustainability commissions/bureaus) and “implementers” (funding, expertise) (cited by: Pocatello, ID, Middlebury, VT)
- (4) Benefits of exploiting regional differences in potential for renewable energy/environmental health concerns include the maintenance/enhancement of community identity (cited by: Pocatello, ID)
- (5) Need to streamline public and private organizations working toward sustainability to form more cohesive initiatives (cited by: Middlebury, VT, Red Hook, NY, Atlanta, GA)

As anticipated, sustainability organizations in the communities we interviewed are operating within a wide range of effectiveness. Funding, public interest or commitment, and the general difficulty of organization/streamlining stakeholders and participants are the most widely cited obstacles to implementing sustainability programs.

### **Challenges/Obstacles**

#### **(1) Funding**

- Lack of funding is clearly the most direct of the obstacles mentioned above, but stems from a more systemic skepticism about sustainability. Funding may be out of the reach of the CCLA, but we propose that the curriculum include some kind of tutorial on networking and most effectively taking advantage of available economic incentives (state, federal, and private) (cited by: Atlanta, GA)
- Low-income demographic has been a focus of several initiatives – revolving loans program for home weatherization (cited by: Pocatello, ID, Austin, TX)

#### **(2) Public Interest/Commitment**

- Public interest seems to be strong, as sustainability/environmentalism has become an increasingly high-profile national issue, however, interview results characterize public attitude as receptive rather than proactive or particularly committed (cited by: Pocatello, ID, Boston, MA)
- Reluctance to support sustainability initiatives is based in concerns about financial viability (cited by: Pocatello, ID)

- Public is most receptive to/supportive of programs that directly save them money (cited by: Atlanta, GA)

(3) Streamlining stakeholders/participants – aligning methods, specific goals

- The abundance of stakeholders and interested participants in both the public and private sectors suggests that interest is strong, but the lack of communication between them is certainly a barrier to their individual and cumulative effectiveness (cited by: Middlebury, VT, Pocatello, ID)

(4) Other

- How to divide focus on residential vs. municipal building efficiency, on renovation/retrofitting vs. new building construction
- Dealing with economic downturn – crisis as opportunity for reform

Cities where “sustainability” is still in its most incipient stages stated that one of the most useful things that the CCLA could provide was evidence that sustainability is financially viable, socially prudent, and logistically feasible in their particular cultural/ecological context. Examples of communities that have reaped significant economic benefits from implementing sustainability policies in terms of energy efficiency or smart growth are likely to be the most compelling pro-sustainability argument for reluctant or skeptical communities.

## Interview Summaries by City

### *Atlanta, GA*

- Contact: Mandy Schmitt (energy efficiency)
- ph. 404-865-8965 email: mschmitt@atlantaga.gov

#### **Summary:**

##### Residential Energy Efficiency Programs:

- Residential Energy Efficiency Programs: Public has been receptive to all implemented initiatives, and is most responsive to programs that save money. Also, urban citizens want to see programs promoting sustainable agriculture.
- Problems: staffing resources and funds. Enforcement of regulations and programs is also a problem, ideals and goals of Atlanta enforcement officials are not aligned with the sustainability department.
- What does Atlanta need? More training for code enforcers. More aggressive code and regulation. Planning review department needs to get on board and align goals with those of sustainability department.
- Next step? Sustainability office would like to see the city of Atlanta provide low interest loans to residents and small business owners attempting sustainability/efficiency efforts

##### Smart Growth:

- Sustainability program defines smart growth as integrating sustainable food into planning, making planning design accessible to disabled, and increasing walk-ability (people are hostile to bikers).
- Belt Line Project: largest economic redevelopment project in the country ([www.beltline.org](http://www.beltline.org)).
- Problems: Atlanta is a very fragmented community and doesn't have a fluid grid system to work with. Possible solutions: Georgia needs a new, progressive governor who would create state level policies that would be beneficial to smart growth and renewable energies.
- Smart growth and energy efficiency are NOT connected in Atlanta. But, Mandy has found the Urban Land Institute and the Georgia Tech planning school to be valuable resources.

### *Austin, TX*

- Contact: Fred Yebra (Director of Energy Efficiency Services, City of Austin)
- ph. 512-482-5305 email: fred.yebra@energyaustin.com

#### **Summary:**

- Austin has had long-running energy efficiency program since 1980s: program is run by Austin Energy, the city's municipally owned utility
  - Board of directors are elected officials
  - This was the **most** important aspect for getting things done, in that the utility is beholden to the city rather than investors. Because both are unified there is also much more cross-pollination of ideas between utility and city
- Major programs: Austin Energy's voluntary programs attract 12,000 to 15,000 participants per year
  - Out of 400,000 residential accounts (households)
- Home audits
  - Rebates for weatherization—duct work, insulation, sealing
  - Initially performed their own audits but did not see much in the way of retrofits
  - Contractors now perform audits for free with profit coming on retrofits
  - Program maintains a list of roughly 60 contractors on the efficiency web site
  - 15-17% reduction in home energy use on average per retrofit
- Free weatherization for low income or elderly customers
  - 600-800 homes per year
- Local energy construction codes for new buildings
  - Insulation required
  - Air conditioning with at least a rating of 14
  - Cost neutral for city

- Biggest challenge: Current economic crisis--tempered homeowner interest in upgrades, revenue not hugely affected because it is derived from percentage of utility bills. City tax-funded programs may decline.  
Solutions:
  - Increase outreach
  - Focus on cost-savings of energy efficiency
  - Help out or defer up-front costs
- Next steps: Point of sale ordinance:
  - Any house sold in the Austin area, the seller must first do an energy audit and supply buyer with information about energy use of house.
  - Buyer and seller can collaborate on retrofitting process
  - Should encourage energy efficiency improvements near point of sale
- Recommendations for CCLA:
  - Emphasize consistency: Utility rebates usually only last a year or two
  - Longer-term programs will guarantee stability for businesses and homeowners
  - Encourage partnerships with local contractors
  - Emphasize outreach to citizens: as a public utility, Austin Energy can't use taxpayer money to advertise on TV/radio, but can focus on education/outreach through community groups, monthly newsletter in utility bills, and direct mail information campaigns
- Costs:
  - Rebate program: \$20 million
  - Paid with surcharge in base utility rates (fraction of a penny on a per kilowatt hour basis)
  - Results in \$17-20 million per year in energy savings
- Advice for communities with municipal utilities: work with state energy conservation office, partner with local utilities
- Those without municipal utility face greater hurdles, but cooperation with state energy conservation office would be key in that case
- State might have more leverage with private utilities
- General Advice for curriculum: Advocate energy efficiency as core policy and one to begin with—cost effectiveness is most compelling reason
- NOTE: We did not talk to him about smart growth as he doesn't have much to do with those issues—potential contacts are director of the green building program or a contact in the planning department.

### ***Boston, MA***

- Contact: Bryan Glascock (Director of the Environment Department, City of Boston)
- ph. 617-635-3850 email: bryan.glascock@cityofboston.gov

#### **Summary:**

- Boston considers itself one of the frontrunners in action against climate change in the U.S. With programs that depend on citizens voluntarily adopting greener habits and technology, and a focus on disseminating information through the city's sustainability website (<http://www.cityofboston.gov/environment/>), they hope people will engage. The number of phone inquiries and web hits indicates that public interest is growing. The mayor has committed to reduce carbon emissions 80% by 2050 in compliance with the Kyoto Protocol. The most ambitious regulation to date is a mandate that all municipal buildings (newly constructed) must be LEED silver certified, and any building larger than 50,000 square feet must comply with basic LEED standards. The city is currently producing a map of all LEED-certified buildings for consumer education purposes.
- Issues: the economic crisis has precipitated a push to move funding away from climate action toward funding firefighters, teachers, and law enforcement agencies.
- Future: sees efficiency standards regulated by federal or state governments rather than by municipalities, thinks there will also be a shift toward mandatory compliance with GHG emission/energy efficiency standards since voluntary compliance seems not to be working.

### ***Burlington, VT***

- Contact: Jennifer Green (Co-Coordinator of the Legacy Project)
- ph. 802-865-7532 email: jgreen@ci.burlington.vt.us

#### **Summary:**

- All city sustainability goals fall under the organization umbrella of the Legacy Project.
- Original mission of the Legacy Project was to direct the development of city with specific goals for the year 2030.
- Legacy project does not enact any policy/program by itself; works with other agencies to implement policy.
- Jennifer Green was very enthusiastic about effectiveness and the transferability of an overarching program like the Legacy Project both to large and small cities.
- The greatest strengths in terms of accomplishing policy goals are the Legacy Project's outreach strategy and the strong support it receives from the mayor's office.
- The most significant accomplishment of the Legacy Project thus far is the development of a climate action plan. The climate action plan was written by 8 working groups; each focused on a specific area for creating a sustainable city.
- Next step is to perform cost benefit analysis on the recommendations from the climate action plan.
- Burlington has a significant advantage in residential energy efficiency in that the electric provider, the Burlington Electric Department (BED), is a municipal organization. This fosters open communication between the Legacy Project and BED for greater ease in monitoring electricity use and program implementation.
  - No specific residential energy efficiency programs have been implemented by the Legacy Project. BED offers several independent residential energy efficiency incentives.
  - The biggest challenges towards implementing policy are adequate budget, staff time, and data gathering.
  - No specific smart growth policies or projects have been implemented yet. No specific smart growth goals defined. Burlington has the general goals of increasing density and increasing walking and biking as transportation means.
- The biggest obstacle to smart growth initiatives is public opposition to increased density.

### ***Carbondale, CO***

- Contact: Michael Hassig (Mayor)
- ph. 970-963-6760 email: mhassig@a4arc.com

#### **Summary:**

- Town works in concert with Community Office for Resource Efficiency (CORE) to develop and sustain programs
- Town subcontracts a sustainability coordinator position to CORE
- Climate protection plan goals: 1: Reduce emissions directly attributable to Town facilities and operations by 25% by 2010. 2: Reduce community-wide CO2 emissions by 25% below 2004 base year by 2012. 3: Turn emissions reduction efforts into an economic advantage. 4: Leverage community investments. 5: Obtain at least 30% of energy for heating and electricity from renewable sources by 2015. 6: Further develop resource-efficient building ethic
- Programs/accomplishments:
  - Unified CORE/ town website for all information about sustainability programs
  - Used city operations as model for community—town hall and other existing town buildings have solar panels and retrofits, one new building since policy established—a town recreation center—is LEED platinum and generates 2/3 of energy on roof
  - Adaptive reuse of old elementary school –was to be torn down, now will be arts and non-profit center/ small business incubator (aiming to go beyond LEED platinum )
  - Green building code – one of the most progressive in the country (uses LEED style point system for homeowners and requires them to attain more points per square foot in house size. The largest houses (over 3000 sq.ft) must supply power onsite or pay heavy fines into town energy efficiency and sustainability fund—green building code uses proactive regulatory measures to raise energy efficiency

- Used very collaborative approach to developing green building code and other initiatives—sat down with contractors and constituents early on to make them active contributors to policy and foster understanding. Town wanted to avoid instituting policy without warning and helping community make transition—policy has received no complaints in town meetings since its enactment—communication has been very key to success and it is easier to make happen in small town
- Town actively participates in regional cooperative programs such as Roaring Fork Transit Authority (RFTA) and Garfield County New Clean Energy Communities Initiative
- Smart growth: growth issues have been extremely controversial for past decade, but although town population has more than doubled (~3,000 in 1990 to ~6,500 at present), it has done so with a less than 10% growth in area
- Town citizens shot down a “big box” retail development at the edge of town in a referendum—debate largely centered around sprawl and “small-town values.”
- Growth considerations are incorporated into climate plan and departments coordinate well—this, again, is much easier in a small town
- Challenges/ other considerations:
  - Town has encountered near unanimous community support for environmental programs and active interest. Ballot initiative to allow town to issue \$1.8 million in municipal bonds for a large scale solar project passed by landslide 81% to 19%
  - Town has avoided free retrofit/ incentive projects due to limited funding, has focused more on regulatory and informational strategies and deferred incentives or retrofits to state or federally funded programs
  - Main town budget cost is subcontracting sustainability coordinator to CORE
  - The Carbondale community is uniquely progressive and well-informed. An environmental ethic is part of lifestyle and environmental issues have been well communicated for over 20 years. It would be hard to replicate political support elsewhere
  - Town is prosperous and near great natural beauty—communicating value of nature in lower income urban location would be immensely more difficult
  - Green building code is transferable to some degree
  - Challenge of maintaining morale in town—as town actions are seen as small in face of global challenges
- Best resources/ideas CCLA could provide:
  - Focus on communication
  - Regulatory path is viable and likely more cost-effective option than voluntary programs
  - Work in collaborative and open manner, do not drop seemingly arbitrary and self-righteous edicts on community—people must know why and how a program works—be honest.

### ***Middlebury, VT***

- Contact: Laura Asermily (Energy Coordinator for town of Middlebury and Middlebury Area Global Warming Action Committee)
- ph. 802-388-9478 email: lasermily@yahoo.com

#### **Summary:**

- Town did a municipal carbon emissions inventory in 2001 (buildings and transportation) – transportation and heating buildings were two biggest energy consumers
- Two current primary sustainability campaigns are:
  - Way to Go (focused on changing modes of transportation in Addison County)
  - Efficiency First (focused on improving residential energy efficiency): provides citizens with a “low carbon diet program” – consists of a workbook using strategy similar to Weight Watchers to help reduce footprint by tracking the emissions associated with different activities within a household. People consistently see reduced utility bills.
- Biggest challenge: following up with participating households to confirm results, keep up motivation

- Middlebury has created guides to obtaining renewable/green energy in Addison County, DIY kits for insulating pipes, windows, etc.
- Middlebury is currently participating in a loose mentoring network with Burlington and Vergennes through VECAN (Vermont Energy and Climate Action Network) but communication and coordination are a huge challenge
- Not much to say on the subject of smart growth – is an entirely different challenge – more systemic
- Best resources a CCLA could provide:
  - Help in facilitating transition to renewable energy sources
  - Guidance in obtaining funding
  - Streamlining resources available to help communities implement sustainable practices: hard to know which organizations/models to partner with or follow
  - Help with coordinating mentoring, sharing best practices among communities
- Questions about CCLA: will it be free/affordable? Affiliated/integrated with established local programs?

### ***Pocatello, ID***

- Contact: Hannah Sanger (Environmental Educator, City of Pocatello)
- ph. 208-234-6518 email: hsanger@pocatello.us

#### **Summary:**

- Pocatello is still very much in the incipient stages of implementing sustainable practices – want to move away from reaching only for “low-hanging fruit” – e.g. moving focus away from changing light bulbs
- Mayor (Roger Chase 2001-present) is strong advocate of implementing sustainable practices – after attending the Conference of Mayors in Park City several years ago, he recognized the importance of working within local environmental constraints to the city’s long-term viability (Pocatello is located in a high desert valley, and access to transmission lines to source energy is limited – they are currently verging on not having enough access) → cites support of public figures as crucial
- Exploiting regional opportunities for solar and wind power is a primary goal both for energy self-sufficiency and because traditional energy sources (oil, coal, etc.) are heavy pollutants and air quality in Pocatello is easily compromised (valley)
- Focus on changing municipal consumption as model before trying to implement new practices in broader community
- Idaho Power (local power company – not municipal, is private) has begun providing energy audits, doing weatherization in manufactured homes for free to raise awareness
- The city of Pocatello doesn’t have much money for sustainability programs, emphasizes the importance of partnering with funders/implementers to make things happen – have done projects with Idaho Power, InterMountain Gap, SEICCA (local housing service), Pocatello Neighborhood Housing Service
- Is trying to model work on Natural Step Program used by LaCrosse, WI
- Best resources the CCLA could provide:
  - Training in renewable energy implementation (Pocatello has a silicon manufacturing plant and really wants to grow regional renewables industry)
  - Evidence that sustainable practices are economically viable/beneficial – sustainability initiatives have to be demonstrably financially prudent in a fiscally conservative city like Pocatello – not huge public commitment to sustainability

***Red Hook, NY***

- Contact: Brenda Cagle (smart growth)
- ph. 845-758-0504 email: brendacagle@yahoo.com
- Contact: Laurie Husted (energy efficiency)
- email: husted@bard.edu

**Summary:**

- Emphasized importance of both incentive-based and mandatory programs for improving residential energy efficiency, support regional/state approaches to implementing sustainable practices
- Discuss need to coordinate efforts of separate entities within a region: private organizations, planning boards, energy coordinators
- Biggest success so far: recently ratified legislation mandating that all newly constructed homes be Energy Star rated
- Best thing CCLA could provide: training, education

## Summary of Recommendations from Interviews

1. **Emphasize consistency**
  - Longer term programs provide stability for consumers and raise participation
  - Competing or unclear programs can hamper effectiveness
2. **Effective communication is very important**
  - Citizens need broad education on environmental issues behind—and benefits of—energy efficiency
  - Cost effectiveness needs to be communicated
  - Communication should not seem self-righteous or condescending but rather collaborative
  - Energy efficiency “one-stop shop” or “branding” can be effective for awareness and communication
3. **Partnerships with other government, NGO, or private organizations can be effective for implementation of energy efficiency programs or increasing municipal leverage on energy efficiency**
  - Cities with municipally-owned utilities can implement energy efficiency directly through the utility
  - Other cities can cooperate with state energy conservation office or other municipalities
  - Partnerships and collaboration, along with local action, may encourage action at higher levels of government
4. **Energy efficiency should be highlighted for its cost-effectiveness**
  - Other, more visible programs such as those involving renewable energy or transportation are important to pursue, but often are over-emphasized for their visibility
5. **Both voluntary and regulatory paths should be considered**
  - Voluntary or incentive programs may be more politically attractive but less cost-effective
  - Regulatory programs may be more cost-effective, but currently less utilized due to political concerns
6. **Communities can use energy efficiency as economic driver for green industry**
  - Energy efficiency retrofits and green building can provide business for local contractors and entrepreneurs
  - Energy efficiency, along with other programs can raise the “green” profile of a city and attract new high-tech or clean industry employers to the area
  - Partnerships and collaboration with individual businesses or local industry groups can advance both energy efficiency and economic interests
7. **Collaboration and communication both vertically and interdepartmentally is paramount**
  - Sustainability office (or coordinator for towns or small cities) should have real power
  - Head-off “turf-battles” with collaboration and communication
  - Sustainability should be a city-wide endeavor—it cannot be seen as separate, but a consideration in any municipal decision
8. **Allow a diversity of communities to participate**
  - Try to minimize costs, especially for smaller communities
9. **Bringing experts/representatives from more successful cities and organizations to workshop might be useful**
  - Conference-style atmosphere could encourage informal diffusion of ideas

## **Part 2: Climate Action Inventory: Organizations, Tools and Resources**

One of the most apparent themes that emerged from our interviews was that, despite the abundance of information on residential energy efficiency available, accessing relevant information is difficult because of a major lack of organization. To make resources more accessible to participating cities and citizens, we compiled a list of organizations and resources into a Climate Action Inventory that we hope ISC will both use in the CCLA and augment in the future.

### **Smart Growth**

#### **Smart Growth America**

- <http://www.smartgrowthamerica.org>
- Launched in 2000, broad advocacy coalition
- Provided direct assistance to more than 40 communities, partnered with governors
- \$1,528,912 – total support (grants, contributions)
- \$1,906,294 – total expenses
- 90+ coalition members – private groups all around the country (see annual report)
- [smartgrowthtoolkit.net](http://smartgrowthtoolkit.net)
- Website is fairly user-friendly, material is useful to both individuals and communities

#### **Smart Growth Leadership Institute**

- <http://www.sgli.org>
- Released set of tools:
  - Smart Growth Policy Audit
  - Smart Growth Code and Zoning Audit
  - Smart Growth Project Scorecard
  - Incentives Matrix
  - Smart Growth Strategy Builder
- <http://www.smartgrowthtoolkit.net/main-content/community-case-studies.html> - great case studies
- Website is highly user-friendly, geared more toward use by communities/organizations than by individuals, although case studies are compelling and could potentially be used by public advocacy campaigns

#### **Growth Management Leadership Alliance**

- Member-based organization with affiliates in many states – can't access their website specifically, only those of their state-based affiliates
- <http://www.1000friendsofflorida.org/info/GMLA.asp>
- [http://www.1000friendsofflorida.org/info/GMLA\\_Survey.asp](http://www.1000friendsofflorida.org/info/GMLA_Survey.asp) - 1,000 Friends of Florida did survey of 39 citizen-based growth management organizations across the country (similar to our surveys for CCLA) – summary of findings at this address
- 1000 Friends of Florida's survey would probably be useful to the CCLA curriculum, website is somewhat poorly organized/constructed and some links don't work

## **Governor's Institute on Community Design**

- <http://www.govinstitute.org>
- Work at state level – encourage planning, conduct workshops with governors
- Published guide: Policies That Work: a Governor's Guide to Growth and Development: <http://www.govinstitute.org/policyguide/introduction.html>
- Program is aimed at governors, geared toward implementation of anti-sprawl policies at state level
- Material is accessible and well-organized

## **EPA's Smart Growth Program**

- <http://www.epa.gov/dced/>
- Technical assistance programs, reports
- National Award for Smart Growth Achievement (link to most recent awardees: [http://www.epa.gov/dced/pdf/sg\\_awards\\_2008.pdf](http://www.epa.gov/dced/pdf/sg_awards_2008.pdf))
- Application for Smart Growth Implementation Assistance – helps 4-5 cities each year through policy analysis and public participation processes - <http://www.epa.gov/dced/sgia.htm>
- Project descriptions and summaries here: [http://www.epa.gov/dced/sgia\\_communities.htm](http://www.epa.gov/dced/sgia_communities.htm)
- Has special program (affiliated with NOAA) for coastal communities: [http://www.epa.gov/smartgrowth/noaa\\_epa\\_texasst.htm](http://www.epa.gov/smartgrowth/noaa_epa_texasst.htm)
- Website is difficult to navigate and potentially disorienting but contains valuable information if you're willing to put in the time to find it

## **Smart Growth Network**

- Founded in 1996, sharing best practices, information, experience
- Coalition of organizations working to promote and implement smart growth – as described by the EPA (a partner) here: [http://www.epa.gov/smartgrowth/sg\\_network.htm](http://www.epa.gov/smartgrowth/sg_network.htm)
- <http://www.smartgrowth.org/sgn/default.asp?res=1440>
- Could serve as a clearinghouse or central point of contact for numerous private organizations, compiled by the EPA
- Very useful, up-to-date database – access to publications, news, calendar of smart growth-related events

## **The Natural Step Program**

- The Natural Step Framework (5 Level Framework) is applicable to businesses and communities – businesses and communities all over US, Canada, and Europe have adopted their approach
- The Natural Step (TNS) Academy is a developing initiative aimed at creating an international hub for sustainable development learning and knowledge creation. The Academy will support sustainability change-agents with the following:
  - Learning Programmes
  - Community of Practice
  - “Go-to-Place” for resources and materials (from: <http://www.naturalstep.org/en/the-natural-step-academy>)
- Sounds very similar to CCLA – shared learning, mentoring program
- Website is somewhat confusing, directly contacting the organization would probably be more fruitful
- Contact for TNS Academy: Heather Worosz: [heather.worosz@thenaturalstep](mailto:heather.worosz@thenaturalstep).

### **Congress for New Urbanism**

- <http://www.cnu.org>
- “The Congress for the New Urbanism (CNU) is the leading organization promoting walkable, neighborhood-based development as an alternative to sprawl.”
- Academic organization—publications/research
- Conferences
- Lobbying for new urbanist- friendly zoning

### **Center for Transit-Oriented Development**

- <http://www.reconnectingamerica.org>
- “The Center for Transit-Oriented Development is the only national nonprofit effort dedicated to providing best practices, research and tools to support market-based transit-oriented development.”
- Policy development – developing guidelines with government agencies
- Outreach/ propagation of ideas
- Publications/research

### **Walkable Communities**

- Organization centered around transit/walkability thinker Dan Burden
- “In June 2001, Burden was celebrated by Time Magazine as one of the world’s six most important civic innovators. He has also been featured by the Associated Press, NBC’s Dateline, The Discovery Channel, and ABC News with Peter Jennings.”
- Focuses primarily on civic training and workshops – “day with Dan” – Burden helps community brainstorm and move around roadblocks

### **Urban Land Institute**

- <http://www.uli.org>
- Coalition of developers, land managers, etc.
- Industry group but also best practices/smart growth advocate
- “Founded in 1936, the institute now has more than 40,000 members worldwide representing the entire spectrum of land use and real estate development disciplines, working in private enterprise and public service
- As the preeminent, multidisciplinary real estate forum, ULI facilitates the open exchange of ideas, information and experience among local, national and international industry leaders and policy makers dedicated to creating better places
- The mission of the Urban Land Institute is to “provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.”

## **Residential Energy Efficiency**

### **Appliance Standards Awareness Project**

- <http://www.standardsasap.org/>
- Appliance Standards Awareness Project (ASAP) works to increase awareness of and support for appliance and equipment efficiency standards.
- ASAP is led by a committee including representatives from the environmental community, consumer groups, utilities and state government
- ASAP gives advice and technical support to those interested in advancing state standards

### **California Public Utilities Commission—Energy Efficiency Groupware Application**

- <http://eega2006.cpuc.ca.gov/>
- Allows for the utilities to submit monthly and quarterly reports to CPUC, and for all users, including the general public, to download the reports and view up-to-date information on energy savings

### **Consortium for Energy Efficiency**

- <http://www.cee1.org/>
- CEE is a group of energy efficiency coordinators from across the U.S. and Canada working together to find common approaches to solving energy efficiency.
- By working together at CEE, administrators leverage the effect of their funding dollars, exchange information on effective practices and, by doing so, achieve greater energy efficiency for the public good.

### **Emerging Technologies Coordinating Council**

- <http://www.etcc-ca.com/>
- ETCC focuses on identification, assessment, and rapid commercialization of energy-reducing technologies, such as advanced lighting, water heating, and air-conditioning systems, for residential, commercial, and industrial customers. ETCC stakeholders are committed to helping achieve California's energy-reduction goals.

### **Energy Center of Wisconsin**

- <http://www.ecw.org/>
- The energy center trains the workforce responsible for the performance of homes and workplaces and collaborates with stakeholders to find ways to make better choices about how people use energy.

### **Energy Efficiency and Renewable Energy Network of the US DOE**

- <http://www.eere.energy.gov/>
- The Office of Energy Efficiency and Renewable Energy (EERE) works to strengthen the United States' energy security, environmental quality, and economic vitality in public-private partnerships. It supports this goal through:
  - Enhancing energy efficiency and productivity;
  - Bringing clean, reliable and affordable energy technologies to the marketplace; and
  - Making a difference in the everyday lives of Americans by enhancing their energy choices and their quality of life.

### **EnergyIdeas Clearinghouse Program**

- <http://www.energyideas.org>
- This program is run through Washington State University as part of the extension energy program. The goal is to provide a comprehensive list of technical information relating to industry, governments, and the utilities about the energy efficiency technologies and practices that exist. Provides this information in the form of articles, databases of tax incentives, lists of products, and factsheets on the web. The program is focused on the Northwest of the United States.

### **EnergyStar Program**

- <http://www.energystar.gov/>
- Energy Star is a program run by the Environmental Protection Agency and the Department of Energy. The main focus of the program is to raise awareness for energy efficiency technology and practices. Does this through information dissemination on the web and through its products. The program gives its energy star logo to products and homes that have a certain level of energy efficiency.

### **Federal Energy Management Program**

- <http://www1.eere.energy.gov/femp/>
- This program is run by the Department of Energy and is meant to assist federal agencies in meeting energy goals/regulatory requirements, design high energy performance buildings, buy energy-efficient products, deploy renewable technologies, work on public opinion of energy efficiency and renewable energy, and help finance energy projects. It does this by consulting on different federal projects.

### **International Council for Local Environmental Initiatives (ICLEI)**

- <http://www.iclei.org>
- This is a worldwide organization that attempts to help local governments organize campaigns/programs that will promote global climate action initiatives. The organization helps its members by providing technical consulting, training, and information to the local governments. The results-based programs that they help design are meant to be locality specific.

### **International Institute for Energy Conservation (IIEC)**

- <http://www.iiec.org>
- The IIEC is a non-for-profit NGO that works worldwide on energy efficiency. The organization often works with key policymakers and industry to shape energy policy and move toward energy efficient practices. The IIEC also attempts to understand the cultural issues specific to the areas where they are creating programs. This approach combined with technical knowledge represents a holistic outlook on energy efficiency, making it more likely to succeed.

### **Midwest Energy Efficiency Alliance (MEEA)**

- <http://www.mwalliance.org>
- MEEA is an organization that looks to provide a collaborative network to advance energy efficiency within the Midwest. The organization aims to be a source for information about technology, products, and energy efficient practices. Essentially MEEA is a networking organization that organizes around experts in fields relating to energy efficiency. They hold several workshops and training classes relating to energy efficiency.

### **National Association of Energy Service Companies**

- <http://www.naesco.org/>
- The preeminent national trade association promoting the benefits of the widespread use of energy efficiency
- The mission of NAESCO is to "promote efficiency as the first priority in a portfolio of economic and environmentally sustainable energy resources and to encourage customers and public officials to think energy efficiency first when they are making energy resource procurement or energy policy choices."
- Website provides project case studies and industry reports as well as information about events and news.

### **Northeast Energy Efficiency Partnerships (NEEP)**

- <http://www.neep.org/>
- Northeast Energy Efficiency Partnerships (NEEP) is a regional nonprofit organization founded in 1996 with the mission of promoting the efficient use of energy in homes, buildings and industry in the Northeast United States
- NEEP Regional Energy Efficiency Initiatives increase the marketplace availability and adoption of quality energy efficient practices and technologies in the Northeast.
- NEEP Public Policy efforts develop and maintain a positive environment for the promotion of energy efficiency in the Northeast through these projects
- Website provides annual reports, business plans, and contact information

### **Northwest Energy Efficiency Alliance**

- <http://www.nwalliance.org/>
- The Northwest Energy Efficiency Alliance (NEEA) is a non-profit organization supported by the Idaho, Montana, Oregon and Washington's electric utilities, public benefits administrators, state governments, public interest groups, and efficiency industry representatives with the mission to drive the development and adoption of energy-efficient products and services.
- The site provides evaluation reports of NEEA projects and analysis of the energy efficiency market

### **Residential Energy Efficiency Database**

- <http://neaap.ncat.org/db/>
- Lists energy efficiency programs by utility and state
- Maintained by the U.S. department of health and human services
- Intended to streamline the process of finding grants, tax breaks, etc to help home owners save energy and money

### **Southwest Energy Efficiency Project (SWEEP)**

- <http://www.swenergy.org/index.html>
- Promotes energy efficiency in Arizona, Colorado, Nevada, New Mexico, Utah, Wyoming
- Tracks efficiency policy, legislation, building codes in each of the states
- Provides workshops, tips, and fact sheets to educate home owners and builders

### Part 3: Climate Action Inventory: Summary Tables

The ISC also asked us to summarize any particularly impressive sustainability programs or initiatives we came upon in our research. The following summary tables describe the most notable initiatives we found.

**Washington D.C. population: 591,833**

Link to policy text: <http://ddoe.dc.gov/ddoe/frames.asp?doc=/ddoe/lib/ddoe/20051121171338.pdf>

Links to other useful documentation: [www.green.dc.gov](http://www.green.dc.gov)

Basic description	Policy passed: District Department of the Environment Establishment Act	2005
	By whom has this policy been cited as a best practice?	None
	Policy type (regulation, standard, or inducement. An inducement is a penalty, fine, or incentive).	N/A
	Summary of policy	A legislative movement to establish an official, government-sponsored Department of the Environment in the district.
Impacts	Any cost information (return on investment, cost to the municipality, payback period)	Established a centralized program within D.C. to promote movements to improve air quality, protect the natural environment and combat environmental degradation.
	Energy or greenhouse gas savings	
Lessons learned	What makes this action unique?	This is the only piece of policy found that actually established a Department through legislation.
	What were factors in their success?	
	What challenges or typical barriers did they overcome?	
	What are implications for transferability? (e.g. political conditions)	This is the only piece of legislation found to date that explicitly establishes a Department of the Environment. Perhaps it can provide guidance to towns/cities aiming to follow suit in the future.

**Boulder, CO population: 91,685**

Policy: Green Building and Green Points Program

Link to policy text:

[http://www.bouldercolorado.gov/index.php?option=com\\_content&task=view&id=1134&Itemid=405#Green%20Building%20Booklet](http://www.bouldercolorado.gov/index.php?option=com_content&task=view&id=1134&Itemid=405#Green%20Building%20Booklet)

Basic description	Policy passed	Nov. 2007
	By whom has this policy been recognized as a 'best practice'?	N/A
	Policy type (regulation, standard, or inducement. An inducement is a penalty, fine, or incentive)	Regulation
	Summary of policy	<ul style="list-style-type: none"> <li>• Requires energy audits for all new homes or remodeling</li> <li>• Requires certain technologies ie: energy efficient lightbulbs</li> <li>• Must recycle a percentage of construction waste (50%)</li> <li>• Divert waste from demolition of buildings from landfills as well</li> <li>• Must earn a certain amount of 'green points' depending on what type of building it is; the larger the development, the more green points the building must earn. Energy efficiency is only one of the ways that these points can be earned, other ways include planting trees, water management, etc.</li> </ul>
Impacts	Any cost information (return on investment, cost to the municipality, payback period)	There is no cost to the municipality since the developer/homeowners take on the full burden of the buildings. Depending on how the homeowners choose to earn their green points, there may be a payback period/return of investments on the technologies they use.
	Energy or greenhouse gas savings	Again, it is affected by the homeowner/developer's choices. Most of the methods for earning green points do have an effect on energy and/or GHG savings.
Lessons learned	What makes this action unique?	<ul style="list-style-type: none"> <li>• Tailors the required amount of green points to the size of the project</li> <li>• Mandates energy audits, which are often voluntary measures</li> <li>• Offers a variety of ways to earn green points, and they keep the options open if some new technology or innovation pops up</li> </ul>
	What were factors in their success?	Does not really have a way of gauging success; compliance is mandatory
	What challenges or typical barriers did they overcome?	Overcame political opposition from politicians or developers who did not want to comply because it would cost more to build/remodel by becoming a law
	What are implications for transferability? (e.g. political conditions)	<ul style="list-style-type: none"> <li>• It really depends on whether a town/city/county/state has strong enough backing to push through the law</li> <li>• If public support is strong enough, legislation can pass and compliance can become mandatory</li> </ul>

**Red Hook, NY population: 10,408**

Basic description	Energy Star	April 2009
	By whom has this program been recognized as a 'best practice'?	Long Island Builders association endorses this program
	Summary of program (how it works, next steps)	Every new home built has to be inspected and rated Energy Star
Impacts	Any cost information (return on investment, cost to the municipality, payback period)	None yet
	Energy or greenhouse gas savings	None yet
Lessons learned	What makes this action unique?	It requires contractors to be more precise in shoring up paths of heat escape and build better quality housing.
	What were factors in their success?	
	What challenges or typical barriers did they overcome?	After four years of info sessions and voluntary Energy Star training, very little, if any, success
	What are implications for transferability?	In this case, incentives do not work, sometimes laws that mandate energy efficiency are required to make a change
	What would they want from a CCLA?	Help in training contractors to build Energy Star homes, advertising to the public why Energy Star is important

**Fayetteville, AR population: 121,015**

Program website: <http://www.accessfayetteville.org/government/sustainability/Energy/index.cfm>

Basic description	The Biggest Loser	[year unavailable]
	By whom has this program been recognized as a 'best practice'?	
	Summary of program (how it works, next steps)	Change in monthly energy use compared to the year before (biggest reducer wins)
Impacts	Any cost information (return on investment, cost to the municipality, payback period)	None
	Energy or greenhouse gas savings	42%-Solid Waste; 40%-PEG Building; 39% Yvonne Richardson; 32% City Hall; 23.8% Fire Station #6; 22% Building Services; 22% Fleet & Transportation
Lessons learned	What makes this action unique?	It compares the savings in <i>buildings</i> to publicize the most energy-saving practices
	What were factors in their success?	Competition & employee awareness of energy use
	What challenges or typical barriers did they overcome?	
	What are implications for transferability?	Fostering competition among businesses can create energy efficiency, sustainable practices
	What would they want from a CCLA?	Help in educating businesses how to save energy in construction and use of a building

**Tulsa, OK population: 300,000**

Link to policy text: <http://www.tulsacleancities.com/>

Basic description	Tulsa Area Clean Cities	[Date not available]
	By whom has this policy been recognized as a 'best practice'?	
	Policy type (regulation, standard, or inducement. An inducements is a penalty, fine, or incentive)	Inducement
	Summary of policy	Promotes a positive public perception of alternative fuel vehicles (AFVs) by highlighting the successes and positive attributes of alternative fuels, educating fleets on alternative fuels, vehicle availability, and directing efforts at projects that will have the greatest fuel displacement and air quality benefits.
Impacts	Any cost information (return on investment, cost to the municipality, payback period)	No cost information
	Energy or greenhouse gas savings	No information
Lessons learned	What makes this action unique?	Concentrates on fuel efficiency and air quality
	What were factors in their success?	Don't know the outcome
	What challenges or typical barriers did they overcome?	Don't know the outcome
	What are implications for transferability? (e.g. political conditions)	Education and outreach can be used effectively to promote ideas without going the legislative route

**Austin, TX population: 880,000 (service area of Austin energy – municipal utility)**

Program website: <http://www.ci.austin.tx.us/acpp/default.htm>

Basic description	Program Started	Power Saver program business partnership program
	By whom has this program been recognized as a 'best practice'?	Sierra Club <a href="http://rmc.sierraclub.org/energy/library/sustainablecities.pdf">http://rmc.sierraclub.org/energy/library/sustainablecities.pdf</a> Energy Star (credited indirectly) <a href="http://www.energystar.gov/ia/home_improvement/Austin_Home_Energy_Mag_Case_Study_Article.pdf">http://www.energystar.gov/ia/home_improvement/Austin_Home_Energy_Mag_Case_Study_Article.pdf</a> Overall program in EE won sustained excellence award from Energy Star twice as well.
	Summary of program (how it works, next steps)	<ul style="list-style-type: none"> <li>• City Utility partnered with local contractors who could/wanted to offer energy efficiency services.</li> <li>• Provided training, directory listing of partner companies on website.</li> <li>• Austin no longer offers free audits to homeowners – didn't have much success</li> <li>• Now partner companies will offer free audit—with assumption or hope of further work.</li> <li>• Austin energy works on outreach and coordination of program</li> </ul>
Impacts	Any cost information (return on investment, cost to the municipality, payback period)	Overall energy efficiency program has over ~20 year period allowed the utility to avoid adding an additional power plant to their system.
	Energy or greenhouse gas savings	
Lessons learned	What makes this action unique?	Focusing on partnerships with businesses rather than volunteer programs or direct contracting with customers
	What were factors in their success?	<ul style="list-style-type: none"> <li>• Volunteers or staff members in direct programs often are not well trained or the programs are too short-lived to make sustained impact</li> <li>• Contractor Businesses already have substantial related expertise</li> <li>• Businesses carry program forward with less program oversight and support from city</li> <li>• Contractors carry ideas into other areas of their business</li> <li>• Supports local economic development</li> </ul>
	What challenges or typical barriers did they overcome?	Giving free audits to homeowners was essentially a failure (did not substantially increase participation). Contractors were encouraged/supported to offer free audits as part of their services, the idea being that homeowner already hiring contractor is more likely to undertake changes. It is hard to tell if this free audit program through contractors was much more effective though.
	What are implications for transferability?	Very strongly supports conclusions of Jamie and Thomas Hand (see Appendix A) that volunteer programs and free audits do not work very well and that partnering with businesses is a much better model.
	What would they want from a CCLA?	Austin didn't give us much info on this—but they would be interested in other successful strategies. Maybe the CCLA could work with new staff recruits.

**Carbondale, CO population: 5,196**

Link to policy text: <http://www.carbondalegov.org/vertical/Sites/%7BE239F6F5-CCA3-4F3A-8B27-95E8145FD79A%7D/uploads/%7B4E823FFE-8071-45C6-866D-C8A4B1B33613%7D.PDF>

Basic description	Policy passed	Energy Efficient Building Program 2007
	By whom has this policy been recognized as a 'best practice'?	
	Policy type (regulation, standard, or inducement. An inducements is a penalty, fine, or incentive)	Ordinance/ regulation
	Summary of policy	<ul style="list-style-type: none"> <li>For all new buildings constructed within the town limits, contractors/owners must follow point system (in the manner of LEED) and achieve a minimum number of points based on house square footage.</li> <li>Owners may pay cash in lieu of points for up to 10% of points (in the manner of Aspens REMP program).</li> <li>Houses over 3000 square ft. must supply part of energy used in home on-site or provide off-site mitigation through payment of fees.</li> <li>Fees from cash-in-lieu and off-site mitigation go to new town Renewable Energy Fund to help pay for retrofits and projects on existing structures or a variety of other possible energy efficiency initiatives.</li> </ul>
Impacts	Any cost information (return on investment, cost to the municipality, payback period)	As ordinance, only costs are associated with inspection—expected to have net revenue
	Energy or greenhouse gas savings	Not yet known
Lessons learned	What makes this action unique?/ uncommon	<ul style="list-style-type: none"> <li>Uses regulation rather than incentive to push forward energy efficiency</li> <li>Treats energy efficiency and green building not as separate programs but unified idea</li> </ul>
	What were factors in their success?	Success not yet proven
	What challenges or typical barriers did they overcome?	<ul style="list-style-type: none"> <li>Pushback from contractors (minimal)</li> <li>First plan was too lenient on super-large houses—town is considering increasing requirements for high sq. ft. houses along with other minor adjustments</li> </ul>
	What are implications for transferability? (e.g. political conditions)	<ul style="list-style-type: none"> <li>Highly transferable (like LEED)</li> <li>Politically may be harder to pass in more libertarian or populous areas (the latter potentially due to an organized contractor/commerce/real estate lobby)</li> </ul>

## Appendices

### Appendix A: Hand Energy Interview

In addition to our conversations with sustainability program directors across the country and our work with web resources, we also came across other information relevant to the CCLA. We had the opportunity to speak with Thomas and Jamie Hand, of Hand Energy Co. (an energy audit company based in southern Vermont). Below is the advice they had for anybody interested in improving residential energy efficiency practices.

#### **What is the best way to spread the word about the importance of energy audits?**

- Radio advertisements and radio public service announcements: the people that contract energy audits listen to Vermont Public Radio – target audiences this way
- Have town take action to lead by example (e.g. update municipal buildings)
- Raise profile of energy alternatives through expos, workshops, or other education/advertising means

#### **How can you get residents interested/motivated to invest in an energy audit?**

- Tax fuel/ make consumption expensive enough so that increasing residential energy efficiency is worth the investment
- Free is dangerous – no commitment, no incentive to commit – reduced cost better  
Also, nobody follows up after a free energy audit. Paying for audits engages homeowners in the process, increases commitment level to act on findings
- Provide economic incentives for efficiency improvements, but not the audit itself
- Inform public about state incentives, municipal-level incentives too complicated

#### **Get other professions involved**

- Get local contractors on same page – need technical education, training workshops – keeping relevant with times, making company unique
- Idea of continuing education to enhance professional credentials

#### **Examples of successful/attempted residential energy efficient models**

- Aspen, CO new residential construction energy code

## **Appendix B: Interview Questions**

### **Questions posed to communities we interviewed about their sustainability initiatives**

#### **Smart Growth**

1. How does your organization define smart growth?
2. What are some examples of successful smart growth initiatives in your community or elsewhere? What impacts have you been able to measure?
3. Looking at the big picture, what are the biggest challenges (political roadblocks, lack of funding etc.) in promoting and implementing smart growth?
  - What do you see as possible solutions to these challenges at local, state or national scales? Legislative/policy-based or incentive-based?
4. What resources (community partnerships, technology, design schools, NGOs etc.) have proven most valuable in your efforts to develop smart growth projects?
5. What resources do you wish you had to aid you in your smart growth initiatives?
6. What kind of training or technical assistance do you need most to implement smart growth in [city name]?
7. How transferable would you say your program was to other cities?
8. What was really key in your success that another city would also need to have to implement the policy or program?
  - Enabling legislation?
  - Budget?

#### **Residential Energy Efficiency**

1. What residential energy efficiency policies or programs have you implemented?
2. How have these been effective and why?
3. Has the public been receptive to certain programs more than others? If so, which ones, and why might that be? What impacts have you been able to measure?
4. What challenges have you faced in implementing these policies or programs?
5. What resources do you need in order to continue to improve residential energy efficiency?
6. What is the next step for your residential energy efficiency programs?
7. Is residential efficiency considered a priority by your city?
8. How does it factor into your overall sustainability goals?
9. How transferable would you say your program was to other cities? What was really key in your success that another city would also need to have to implement the policy or program?
  - Budget?
10. What resources (community partnerships, technology, design schools, NGOs etc...) have proven most valuable in your efforts to develop smart growth projects? What are the most valuable resources could the CCLA provide?

### Appendix C: Focus Cities

Table of cities we initially contacted. Cities in bold are those that we interviewed.

City	Population
New York, NY	8,274,527
Chicago, IL	2,800,000
Phoenix, AZ	1,552,259
San Francisco, CA	799,183
<b>Austin, TX</b>	<b>743,074</b>
<b>Boston, MA</b>	<b>608,352</b>
Seattle, WA	594,210
Washington, DC	591,833
Portland OR	575,930
<b>Atlanta, GA</b>	<b>519,145</b>
Miami, FL	409,719
St. Louis, MO	355,663
Tulsa, OK	300,000
New Orleans, LA	288,000
Juneau, AK	279,671
Salt Lake City, UT	180,651
Berkeley, CA	102,743
Fayetteville, AR	121,015
Boulder, CO	91,685
Asheville, NC	68,889
Palo Alto, CA	58,598
Medford, MA	55,765
<b>Pocatello, ID</b>	<b>51,466</b>
Charlottesville, VA	45,049
<b>Burlington, VT</b>	<b>38,899</b>
Meridian, MS	38,314
Keene, NH	22,834
<b>Red Hook, NY</b>	<b>10,408</b>
<b>Middlebury, VT</b>	<b>8,183</b>
<b>Carbondale, CO</b>	<b>5,196</b>

### Acknowledgements

We would like to thank Elaine Wang, our liaison, and Steve Nichols at ISC for the opportunity to be involved in the cultivation of their workshop, the Community Climate Leadership Academy. We are excited to see the positive influence the workshop has on developing sustainability programs in cities and towns across the U.S., and contributing to the goal of our class, getting back to 350 ppm carbon dioxide in the atmosphere. Many thanks go to Diane Munroe and Jon Isham, our leaders throughout the semester. In creating the class “Getting to 350”, they also generated a unique opportunity for us as students, activists, and citizens of the earth to get involved in an issue that is not only practically—but also personally—important to the members of our group.