ENVIRONMENT | COMMUNITY | OPPORTUNITY | SUSTAINABILITY
A SUSTAINABLE FUTURE FOR CHITTENDEN COUNTY

Steering Committee Meeting
January 25, 2012, 2011; 7:45 am – 10:00 am
DoubleTree Hotel, 1117 Williston Road, South Burlington
(Conference Center is located in the rear of the building)

AGENDA

7:45 Breakfast and Networking

8:00 Call to Order & Introductions

8:05 Quick Review of Project Status & Documenting Efforts

8:10 Approval of October 26, 2011 Meeting Summary – *ACTION* (attached)

8:15 Acceptance of Analysis Reports – *ACTION* (attached)

8:30 Preview Draft Indicators (attached)

9:15 Revised ECOS Working Group Structure

9:35 Next Steps/Engagement Efforts

a. Review Draft Indicators with your organization
   - Contact CCRPC to attend your meeting (we will contact towns)
   - Submit Comments on Draft Indicators by Friday, March 16

b. Communication Tools input

10:00 Adjournment - **Next Meeting: Retreat - April 25, 2012 from 8am to 12pm**

PLEASE NOTE: For carpooling/ridesharing opportunities to this event, please see GoVermont 's website.

Steering Committee Meeting Summary
October 26, 2011
DRAFT

1. **Breakfast and Networking**.

2. **Call to Order & Introductions**. Penrose called the meeting to order at 8:06am and welcomed the new Steering Committee members. All members introduced themselves. Sandy Miller then presided.

3. **Approval of Additional Steering Committee Members**. **Catherine Dimitruk moved, seconded by Chris Cole, to approve the new members. No discussion. The vote carries.**

4. **Quick Review of Project Status & Documenting Efforts**. Charlie updated members on the project. He explained the sign-in sheets, which were being circulated. Two requests were on the sign-in sheet: 1) to document the in-kind hours since last meeting (including how many people were talked to about the goals), and 2) let us know if you would like to host a kiosk. If this format works, this will be done at each meeting. Charlie thanked members for all their efforts.

5. **Approval of May 25, 2011 Meeting Summary**. **Garret moved, seconded by Ginny, to approve the meeting summary. There were no additions, deletions or corrections. Vote carries. Jim Dudley abstained.**

6. **Approval of Goals**.

   a. **Summary of comments received**. Charlie thanked those who reviewed the goals, which went out for comment mid-July. Public workshops were held in Burlington and Williston in September. Something that came out of the goals review is that the goal statements were not full-bodied enough. In the revised version, there is more to the goal structure: vision, mission, principles. There were many comments on how to knit the whole process together, and we are carrying forward a graphic from the previous CEDS process showing how everything is connected. A report of the comments can be found on the ECOS website. These are not *new* goals; these originated from your 60 planning documents and were synthesized.
   b. **Action on revised goal statements**. **A motion to approve the revised goal statements was made by Ed Booth, and seconded by Garret Mott.** Judy Dow questioned Principle #5 and spoke not only of not depleting resources as sustainable, but leaving things better for future generations; Sandy asked for suggested language. Garret suggested "meet the needs of today while maintaining and improving …" Jim Fay spoke about the Built Environment and that water supply should include wastewater and should say, 'insure adequate water and wastewater needs.' Charlie Baker suggested differentiating drinking water and wastewater. Marty Illick suggested changing #3 under Built Environment to 'Insure adequate future water and wastewater for all users.' Should we also add something about storm water? Ginny Lyons said wastewater brings up the topic of infrastructure as well as ground water and stormwater and thinks 'Insure adequate infrastructure for wastewater treatment and adequate future water quality and supply for all users.' Tom Buckley suggested breaking that into two goals. Many people agreed. Charlie said he will revise #3 and

break into two goals, and pointed out that infrastructure can also be found under Economic Infrastructure. Rachael Batterson questioned the phrase 'now and future' and thought 'future' should be replaced with 'on-going' care. **Sandy asked for consensus and clearly a majority present agreed**. Other discussion included Melanie Needle referring to what Judy mentioned about the principle and it was agreed that we borrowed those principles from ICLEI and perhaps we might add that statement but not change the principle. **Leslie Pelch said she would suggest changing the attribution to "adapted from" – there was agreement on this**. David Raphael responded to Ms. Dow's recommendation that we include 'and improve' under Natural Systems #1. Rachael said that Social Community speaks a lot about health goals and nothing about diversity and integration; Charlie responded that that language moved to the principles. Sara Martinez de Osaba thought Economy #5 should include improving workforce education and training, and to delineate academic and workforce training. Martha Maksym noted that education is separate under Social Community, which cites life-long learning and providing social supports. Leslie said this seems appropriate for this level of document. Sandy reminded members that these goals are intended to be broad and work tasks will be under them. Rachel said she thought there should be a new #7 in Social Community to "expand housing choice for people of all incomes, races and ethnicities.' **Debbie Ingram wants to add 'and ethnic neighborhoods' to Built Environment #5 and a majority of members present agreed**. Ginny agrees with the last comment: that integration of the social community should be based on race, age, and ethnicity, which is different from housing. Garret suggested 'increase opportunities … 'regardless of race, ethnicity or age' or 'mixed income, ethnically, racially and demographically diverse.' Pablo Bose said he is not sure he would want that changed and does not think this is a broad principle. Tom Buckley reminded members that it says "all types;" Charlie agreed that that was the intent and thinks the idea is captured. Larry Kupferman said this sounds like a small group effort, and is thinking about the time: this would be good for those who expressed interest to work on and to provide for future consideration. Asked by Sandy if 'all types' or 'mixed' works, John Lajza disagreed and wants to continue to work on this; also to apply the same concept to Social Community, and senses we need an additional goal. **Ginny offered a straw vote. Add another goal: Integrate diverse cultural racial and ethnic groups into the social fabric and activities of the County. Vote: Approved to add as #14.** Judy feels that in Built Environment #12 'respect and interpret' is a contradiction for her people, and wishes to take out 'interpret.' Leslie said we need more of an explanation and Jim Brangan strongly believes that is essential to interpret our heritage and that it remain in that goal. Sandy will refer this back to the Committee. **Kurt thinks this is valuable discussion, and moved to call the question to approve the revised broad goals with the idea that working groups will reconvene to work on the revisions to the goals, seconded by Jim Dudley. The vote carries.** Leslie asked members to avoid wordsmithing and to bring up major concerns that will then be considered in the future.

7. **Preview Draft Analysis Reports**
   a. **Economic – GBIC**. Seth Bowden introduced members of Garnet Consulting Group: Jeff Blodgett, Bill Frederick and Mark Waterhouse. Mark explained that first phase is economic research and then, an economic development action phase. He referred to the three documents, which all feed into the action plan: the Economic Base Analysis and a Competitive Assessment which feed into a Target Industry Assessment. Jeff Blodgett summarized the key findings: since the 1950's

Vermont has had the second best job growth in New England, but private job growth has been flat since 2000 except for some growth in government sector, federal and military. There has been an increase in a younger population, more likely to rent; our population also experiences higher wages and income in this area. The GDP in the Burlington MSA is much higher in the public sector in Vermont. Insurance costs in the private sector are up over 50% in short period of time. Vermont has escaped the bulk of the downturn in housing prices and still retains higher housing costs. The high unemployment rate and lack of job creation remain challenging. The Competitive Assessment review highlights the strengths and challenges. The growing younger population is favored by employers, with median income above the national average; 47% of the population possesses at least a four-year degree. We have a well-diversified economy with a growing tech and entrepreneurial base – one of the leaders in the country. The workforce is outstanding, according to Garnet's survey of employers. Mark Waterhouse explained that the Competitive Assessment found that we have a good supply of available buildings; Chittenden County is easy to get to by road and air, but not so good by rail. Looking at the challenges vs. the assets, Bill is pleased to report, from their perspective, that the assets outweigh the challenges. Key is the tightness of the skilled labor force with labor demand outstripping supply in a year; we have lower wages and salary than the national average (excluding IBM). Tech operations cannot get the labor they are looking for so are expanding elsewhere. IBM is skewing our data and we have, otherwise, high retail employment. There is a perception of a regulatory environment (Act 250) and a short supply of real estate on which to build. Mark said he has heard of a need for intra-regional roads and also about an inadequate telecommunications network. There is an impending need for road improvements and obtaining permits and financing are issues. The Chittenden County brand is not well-defined, with a neutral image, and we need to promote ourselves and develop recognition in the marketplace to attract talented labor. There is a lingering perception that GBIC is motivated for land development for factories, which is not true. There is a need for improving economic development programs for prospective and existing businesses. Target Clusters are economic targets of intent and of opportunity. Marked showed a preliminary list of twelve targets that will feed into the economic development action agenda.

b. **Housing – VHFA**. Leslie Black Plumeau presented. The FHFA, together with CCRPC and CVOEO, looked at four areas of housing needs: housing choice fairness, affordability, characteristics and location of homes and growth needs. Summarizing highlights of the analysis report, Leslie said there are approximately 500 homeless people each night in Chittenden County. She cited their limits regarding affordability and access, which is true for non-white, disabled and single-parent households whose populations are growing. Many county residents spend more than 50-60% of their incomes on rent or mortgage payments, utilities and property taxes. Chittenden County renters occupy older housing stock, built around 1940. A good portion of workers commute 25 miles or further each day. Growth expected among owners will be met easily with homes in the planning stages; the rate of production will easily meet demand. For renters, production should be increased to meet demands over the next five years.

c. **Land Use/Transportation – CCRPC**. Melanie Needle presented a summary of land use changes from 1950 – 2005, and used an animated map to show that growth took place from the Burlington area out to the eastern portion of the County, comprised mostly of large-lot single family homes. A study was done between 1990 and 2008 showing 70% land consumption.

Melanie showed the Chittenden County Regional Plan Planning Areas with spatial designation of the County in areas similar in development and land use goals: Center, Metro, Suburban, Village, Enterprise and Rural. This is an important factor in gauging progress and where we are developing over time. The Center Planning Area encompasses the state's Smart Growth program including new town centers in Williston and Colchester and Winooski. The graphs are a combination of dot maps and planning areas and shows growth and a trend of moving into suburban and rural planning areas. She showed current residential densities (1 – 3 dwelling units per acre). Planners ask if this is sustainable in terms of energy, air quality and environmental impact. Peter Keating spoke about the tools that help answer that question. Peter exhibited maps that show scenario planning over the last 50 years which, given growth parameters, where might houses and jobs go and at what densities. It is the first look at trends by type. CCRPC conducted workshops several years ago asking the public how they might see future development; they traded for higher density development and cluster development around the County. Then, CCRPC created a bookend future scenario based on ½ the housing and jobs placed in Burlington and Winooski. They looked at the scenarios in the context of the Transportation Demand Model (TDM), which produces information on land, environment and transportation. Then this was presented to the public in an on-line survey and showed a strong preference by over 800 survey-takers to change the trend from single large-lot dwellings, and cluster jobs and housing in the centers. Recently, they shifted gears and asked if land use remained static, but switching out different transportation scenarios; the group is now analyzing three scenarios (details are in the report). In the preliminary analysis, one is based on congestion and shows that no matter what transportation strategy is used, growth will increase congestion. They will be analyzing the cost for selecting one of these scenarios. These scenarios and creation of other transportation scenarios will be mixed and matched and brought back to this group, getting into more specifics in the future.

d. **Energy – VEIC. Bill Bowman**. Bill said the Energy group wanted to define sustainability at the outset, and that there are two sides to the energy equation: how much raw energy do we use, and how and where do we get it? If we use more than we really need, we are wasteful and not sustainable; if we produce energy by damaging our planet, it is not sustainable. Utopia is in sight. Vermont believes in conservation and efficiency. We have an efficiency utility (VEIC) and in electrical consumption, we flat lined; consumption per capita is going down in Vermont (we are one of the few states). Bill exhibited the Energy Team goals, which are broad, and achievable. Maybe in our children's time, we can have the energy we need to sustain and improve our lifestyle without destroying the environment. There has been good energy planning in Chittenden County at the municipal level and the state level, with the refreshment of the Vermont Comprehensive Energy Plan. Draft 1 is available and is required reading. The Energy Planning and Implementation Guidebook for Vermont Communities is also required reading. What is missing? Where are we, where do we want to go? As we progress, we need metrics, and the Energy Group is working on this now with the Center for Rural Studies; as well, we need to develop tools to measure priorities and risk management devices.

e. **Natural Resources – LandWorks**. David Raphael described the purpose of the group's work. The content of the analysis identifies data sets and highlights the trends, documents map sources, identifies other analyses and references and establishes some preliminary recommendations.

This work was made possible by the Natural Resources Working Group, which identified four key areas to focus on: water quality, forest fragmentation, working landscape and scenic resources. After analyzing the information, the group came up with a preliminary conclusion. Three quarters of Chittenden County is in private ownership; our culture and landscape is not static. Chittenden County is reverting to land area, with smaller farms; however, 25% of the core forest has been lost. The specter of climate change is cast over all these studies and having a significant impact on the quality of natural resources. All town plans highlight the importance of natural and scenic resources, but a lack of regulatory standards for preservation. The key elements to grapple with are how and where we develop, the nature and extent of the working landscape, integrity of natural resources and the synchronicity of plans and bylaws from town to town, creating regional approach.

f. **Social – Champlain Initiative/DOH/Fletcher Allen**. Heather Danis said the report is mostly placeholders to be contained in the final report. This is a self-formed work group and Heather invited anyone interested to join. The group spent 20 hours over the summer, and is now working on the data analysis report. If you'd like to learn more about these concepts, there is an upcoming 'Building Healthy Communities' training. Health care only contributes 10% to our health; the remaining factors are behavior and environment. The top three threats are tobacco, poor diet and physical activity, and alcohol. Heather highlighted some data points and concluded that to some extent behavior follows from environment.

6. **Next Steps /Engagement Efforts**. Larry Kupferman explained that there should be a timeline for receiving additional input from those who participated today. He invited new members to join the work groups and Sandy will make sure that that happens. Charlie thanked everyone for coming and to those who presented today. He emphasized to members that all reports are Draft #1, and not to invest too much time reviewing these reports. There will be Draft #2, published by November 15th. Look for an email with revised reports in a few weeks and to please get comments in by the end of the calendar year; as well, additional comments about the goals statements. Elizabeth Reaves, with CRS, will help us with the indicators. To help you with reviewing these with your organizations, Charlie will provide tools such as PowerPoints, a press release to use in local papers and/or an email or Facebook message. The website is the best place to collect comments. If anyone wants someone to come to one of their meetings to discuss the reports, please let him know. David is working on public engagement activities and beginning to get into the schools. They are doing intercepts, video interviews and handing out surveys; there are also kiosks for public input that can be placed at your organization. ECOS is on the campus of Champlain College and will be at UVM and CCV in the coming week as well as the high schools. The Speaker Series will be announced in the near future. The ECOS website will continue to be updated. In summary, this process is about trying, through the engagement effort, to garner public input, promote a dialog, taking the comments and plugging them into the goal statements and, in the future, into action, so we benefit from this input.

    a. Review Draft Analysis Reports with your organization
        - Contact LandWorks/CCRPC to attend your meeting
        - Submit Comments on Draft Analysis Reports by December 31

b. LandWorks Report on Public Engagement Efforts

Ginny Lyons commented that she thinks we should be looking at a land use capability map for our County, and how to make that a firm commitment to use our natural resources and land going forward. The Economic Development section excluded free trade agreements, which can affect our branding and the Trans Pacific Agreement that is coming forward will change our capacity to brand as Vermont. Mark responded that that will be in the Action Plan.

7. **Adjournment.** The next meeting will be January 25, 2012**.** The meeting adjourned at 10:03am.

Respectfully submitted,

Leslie J. Bonnette

Leslie Bonnette
Executive Assistant

ATTENDEES AT OCTOBER 26, 2011 ECOS STEERING COMMITTEE MEETING

Bolton, Rodney Pingree
Bolton, Leslie Pelch
Buel's Gore, Garrett Mott
Burlington, Larry Kupferman
Burlington, David White
Burlington, Bill Keogh
Burlington Legacy Project, Jennifer Green
CCRPC, Charlie Baker
CCRPC, Peter Keating
CCTA, Jon Moore
Champlain Water District, Jim Fay
Champlain Water District, Bernie Lemieux
Charlotte, Charles Russell
Charlotte, Marty Illick
CVOEO, Kevin Stapleton
Judy Dow
Essex, Irene Wrenner
Essex Junction, John Lajza
Fletcher Allen Health Care, Penrose Jackson
G.B.I.C., Curt Carter
G.B.I.C., Seth Bowden
Hinesburg, Andrea Morgante
Huntington, Ed Booth
Jericho, Catherine McMains
Just Transformations, Denise Dunbar
Lake Champlain Basin Program, Jim Brangan
Local Motion, Brian Costello
Northwest Regional Planning Commission, Catherine Dimitruk
Geoffrey Urbanik
SerVermont, Hal Colston
Shelburne, Jim Dudley
South Burlington, Sandy Miller
South Burlington, Sandra Dooley
Tetra Tech ARD, Lindsay Reid
United Way/Champlain Initiative, Martha Maksym
United Way/Champlain Initiative, Barry Lampke
University of Vermont, Joe Speidel
University of Vermont, Elizabeth Reaves
University of Vermont - Geography Department, Pablo S. Bose
VT Agency of Human Services, Jane Helmstetter

VT Agency of Natural Resources, Christy Witters
VT Agency of Natural Resources, Peter LaFlamme
VT Agency of Transportation, Chris Cole
VT Department of Health, Heather Danis
VT Energy Investment Corp., Bill Bowman
VT Energy Investment Corp., Alison Hollingsworth
VT Housing Finance Agency, Sarah Carpenter
VT Housing Finance Agency, Leslie Black-Plumeau
VT Interfaith Action, Debbie Ingram
VT Legal Aid, Rachel Batterson
VT Multicultural Alliance, Sara Martinez de Osaba
VT Natural Resources Council, Kate McCarthy
VT Natural Resources Council, Brian Shupe
VT State Refugee Coordinator, Denise Lamoureux
Westford, Dave Tilton
Williston, Ginny Lyons
Winooski, Tom Buckley
Winooski Valley Park District , Yumiko Jakobcic
CCRPC, Julie Potter
CCRPC, Melanie Needle
CCRPC, Claire Leonard
CCRPC, Dave Roberts
RPC, Leslie Bonnette
CCRPC, Janet Botula

MEMORANDUM

DATE: January 18, 2012

TO: ECOS Steering Committee

FROM: Charlie Baker, CCRPC

RE: ANALYSIS REPORTS - ACTION

The 2nd Phase of the ECOS Project was to produce data and analysis in order to improve the common understanding in our community with regards to economic development, housing, energy, land use and transportation, natural resources, public health, and education. The Draft #1 Analysis reports were prepared and reviewed at the October 26th ECOS Steering Committee meeting with each of the authoring agencies or consultants providing a brief overview of their findings.

Subsequent to that meeting, revisions were made and Draft #2 Analysis Reports were released for public comment from November 15 – December 31, 2011. We received 686 comments from 18 individuals/groups. These comments are being collected into one table and will be posted on the www.ecosproject.com website the week of the meeting.

The Analysis Reports (Economic Base Analysis, Competitive Assessment, Education, Energy, Historic Development and Future Land Use/Transportation, Housing Needs Assessment, Natural Resources, Public Health) have been revised in response to these comments, labeled "Final Draft" and posted to the website at http://ecosproject.com/analysis. The information from these reports has been used to help identify indicators and key issues; of which the first draft is being presented to you today. Each phase of the ECOS project will build upon the preceding phases and ultimately the final ECOS product will become the Regional Plan (including the MTP (metropolitan transportation plan) and CEDS (comprehensive economic development strategy)). While we transition from one phase to the next, the products from the previous phases will be re-worked until a final draft is completed and provided to the public for review.

On January 25 we will ask the Steering Committee to consider the following action: **to accept these Analysis Reports with the understanding that that as a part of the final ECOS product they remain open for amendment until the whole product is finalized.**

If you have any questions, please contact Charlie Baker at cbaker@ccrpcvt.org or 735-3500. Thank you for your assistance and consideration.

Draft #1
Chittenden County Indicators

1/18/2012

An ECOS Report

Indicators for the ECOS project will provide a shared lens to track the progress of Chittenden County against our goals related to the natural systems, built environment, economy and social community. Evaluating our progress towards our goals will allow us to focus resources on those areas that most need additional attention to achieve a healthy, inclusive and prosperous community.

ecos

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A SUSTAINABLE FUTURE FOR CHITTENDEN COUNTY

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INTRODUCTION

The sustainability goals for Chittenden County are representative of the common values that Chittenden County residents share. The goals provide a whole system perspective that connects actions taken to address one issue with the effects it has across topic areas. The ECOS process and the resulting plan underscores the understanding that when decision-making is localized and accountability is shared across planning organizations, agencies and among stakeholders, the greater the likelihood is that we will achieve our goals.

Indicators for the ECOS project will provide a shared lens to track the progress of Chittenden County against our goals related to the natural systems, built environment, economy and social community. Evaluating our progress towards our goals will allow us to focus resources on those areas that most need additional attention to achieve a healthy, inclusive and prosperous community.

- Focused partners = Focused Region = Success

ECOS OVERVIEW

The ECOS project includes 5 phases: In the first phase of the project, the Steering Committee drafted goal statements for public review. These goal statements were drafted after reviewing 60 planning documents and 2500 statements from those documents. The goal statements are divided into four topic areas for ease of discussion. These topic areas are: 1) Built Environment; 2) Economy; 3) Natural Environment; and 4) Social Community.

The second phase of the project was focused on data analysis to achieve common understanding in the areas of economic development, natural resources, housing, transportation, land use, energy, public health, and education. The draft analysis reports were presented to the Steering Committee at the end of October, with public review during November and December, 2011. Based on public comment, these reports will be revised and finalized by the Steering Committee in January.

Phase 3 is the development of indicators that will show all of us how well we are achieving our goals. The draft indicators are presented in this report to the Steering Committee in January with public review in February and March, 2012. The Steering Committee will consider accepting the indicators with revisions based on public comment at their April meeting.

Phase 4 is prioritizing actions to achieve our common goals. The first draft of actions will be presented in April 2012 with approval scheduled for the October Steering Committee meeting.

The results of Phases 1 through 4 will be used in the development of the Chittenden County Regional Plan (incorporating the Metropolitan Transportation Plan and Comprehensive Economic Development Strategy) and continue to live as we use indicators annually to track progress and revise priorities to achieve our goals.

Phase 5 is implementing the actions. The Steering Committee will decide upon the prioritized actions to fund near the end of 2012 with $280,000 of federal funding budgeted as well as other resources that may be applicable.

A key component of the work in each of these phases will be the integration of public comments and ideas to reflect shared implementation priorities and to develop a common vision for the region's future. The initiative includes a comprehensive outreach component to engage Chittenden County citizens of all ages and backgrounds in the development of the project goals and outcomes. As part of this effort, the project will use a wide variety of techniques (including art and artists) to reach-out to and involve different constituencies, particularly those groups and individuals who do not typically participate in public planning projects.

HOW TO READ THIS REPORT

This draft report is a first attempt to distill the goals, key issues and indicators for our region. Most of these indicators are familiar. Some of them do not perfectly capture the goal statement but were an attempt at identifying a proxy indicator. There are often data gaps which we should discuss to determine if there is an existing data source or a need to consistently collect data that is not currently collected.

The introduction to this report provides some helpful background information on indicators and how they are used. It provides a list of criteria to use to evaluate the merit of an indicator and walks readers through the indicator evaluation process using an example of an ECOS goal and indicator in use. The section "Why These Indicators?" explains how key issues and indicators were identified and matched to the ECOS Goals.

Please provide us your comments on this first draft.

- Is this goal right? Does it need to be reworded?
- Are the key issues the right key issues?
- Is this the best key indicator for this goal; and are the other/supporting indicators useful or are there other indicators we should track (do they tell us what an indicator should tell us; do they measure what we would like to measure; and is it something that we are able to measure)?
- Are there numeric targets for this indicator that make sense?

Occasionally in this first draft report you will see some suggested edits to goals in *red italics* for consideration by the public and ECOS Steering Committee.

In the next iteration, we would like to incorporate some symbols to more easily determine those indicators that are going in a good direction (☺⇧👍), are okay (😐⇔👌), or are going in the wrong direction and need attention (☹⇩👎). By clearly identifying those indicators that need attention we can evaluate current efforts and assist decision-makers in revising actions to reverse the negative trend. To support these efforts, the Chittenden County Regional Planning Commission is committed to annually updating this indicators report.

INDICATORS PURPOSE

Indicators are quantitative measures that the ECOS project will use to measure sustainability. They are tools that are designed to alert us to the condition of our system. They allow us to reflect on where we have been, where we are now, and what critical areas need our attention if we are to achieve our sustainability goals.

Indicators:

- Tell us if we are moving towards sustainability
- Simplify complex systems
- Identify priorities
- Alert us to issues that need attention and analysis
- Assist in decision-making
- Help us to tell the story

It is important to remember that indicators are powerful, important, and necessary, tools, but they still need people behind them to make our community sustainable.

CRITERIA FOR EVALUATING INDICATORS

Indicators are meaningful and useful when they reflect what we would like to measure and are something that we are able to measure. Evaluating the merit of an indicator is important.

To determine if the indicator reflects what we would like to measure it should:

a. Gauge progress toward a desired regional result or outcome
b. Be understandable and transparent to most people
c. Drive multiple results
d. Generate synergy across indicator categories
e. Be actionable

To determine if the indicator is something that we are able to measure, the data should be:

a. Affordable to gather
b. Produced by a trusted source
c. Available consistently over time to produce a trend
d. Available region–wide, but can be disaggregated to local areas for comparisons and mapping
e. Available, if possible, for other regions, states or countries for comparisons outside of the region

Other factors that influence the merit of an indicator or group of indicators are:

The number of indicators for each category should be few for the sake of clarity and simplicity, but allow other/supporting indicators to honor the breadth and complexity of issues.

Although priority is given to using existing data, it is possible that consensus will emerge around the development of new indicators. (Source: Greater Portland Vancouver Indicators. GPVI Indicator Criteria. http://pdx.edu/sites/www.pdx.edu.ims/files/GPVIIndicatorCriteria.pdf Updated January 2011)

WHY THESE INDICATORS?

The Analysis Reports prepared in Phase 2 of the ECOS Project identified key issues and made recommendations relating to each topic area: Built Environment, Economy, Natural Systems, and Social Community. The reports identified data that was valued as an important part of the analysis in both the identification of key issues and the recommendations made to address the issues. The majority of the indicators proposed are taken directly from these reports. Where they are not found in reports they were identified as important and relational to the goals by existing research and through tried and tested use in other sustainability planning projects. Additionally, the proposed indicators meet the aforementioned criteria.

EXAMPLE OF AN INDICATOR IN USE

To understand how indicators are useful let's look at one of the goals for the Built Environment.

Keep in mind the following questions:

Is this goal right? Are the key issues the right key issues? Does the key indicator measure what we want it to measure? Are there numeric targets for this indicator that make sense?

Built Environment Goal 1: All future development will support, maintain, and reinforce Vermont's historic settlement pattern of compact hamlets, villages and urban centers separated by and harmonizing with working and natural rural countryside; adhere to sustainability principles of environmental quality, economic vitality, fiscal responsibility, and social and inter-generational equity.

Key Issue - Why do we care? What is the problem?

- The Chittenden County Historic Development and Future Land Use/ Transportation Analysis identified past development patterns as the leading cause of the suburbanization of the county's rural municipalities; low density, auto-dependent areas. This is a key issue because the impacts of this type of development are known to cause congestion, increase green-house gas emissions, and lead to excessive land consumption which effects the health of natural communities and the productivity of the working landscape.

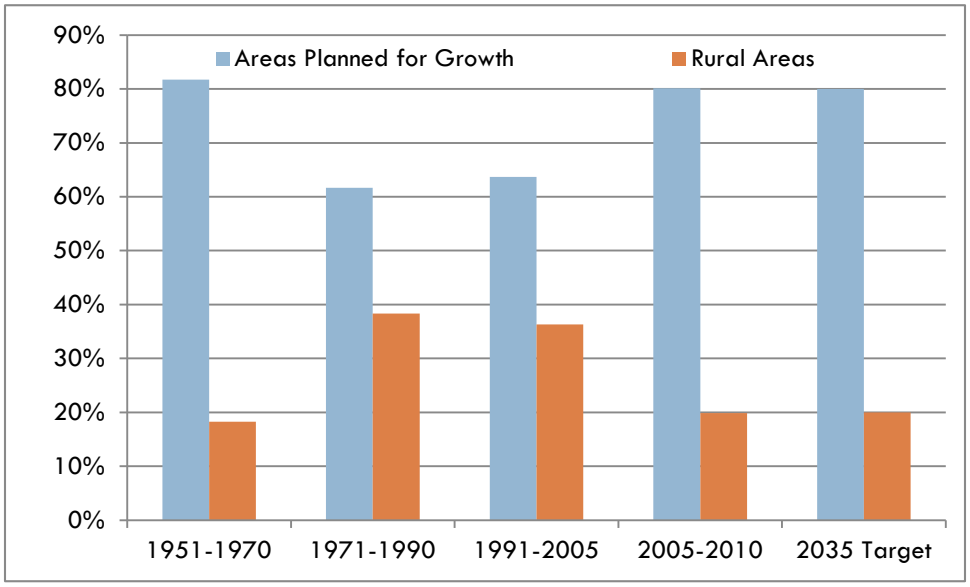
Let's Review the Key Indicator.

Key Indicator – How are we doing?

% growth in areas planned for growth

This indicator is calculated by the number of new structures in each planning area as a percent of total new structures in the county. The figure below illustrates the historical development patterns for the county from 1950-2010 using this calculation including the current target.

Percent of New Structures in Areas Planned for Growth: 1950 – 2010



Source: 1951-2005, UVM Year Built Data, 2005-2010, VT e911 board esites, 2035 Target, CCRPC

As seen in Figure 1 more than 80% of the growth between 1950 and 1970 took place in areas planned for growth, but growth in the 1971-1990, and 1990-2005 time periods was more concentrated in the rural planning area. If this indicator had been used to track changes in land use patterns in the 1970's it is possible that the county could have adjusted settlement patterns to reflect a more viable growth pattern.

The time period between 2005-2010 shows that 80% of new structures were built in areas planned for growth.

What does it tell us?

a. If we are moving towards sustainability.
   - ✓ Since 2005, policies have shifted to encourage development in areas planned for growth. The indicator going forward will tell us if this policy shift is succeeding.

b. Simplify complex systems
   - ✓ The relationship between land use patterns and transportation, housing, employment, natural systems, working landscape, and quality-of-life is complex. This indicator helps to simplify that complexity.

c. Identify priorities
   - ✓ If the trend in growth suddenly showed an increase in units in rural planning areas, this indicator would highlight growth patterns as a priority issue in need of cooperative attention to redirect growth.

b. Alert us to issues that need attention and analysis
   - ✓ If the trend was in the negative direction (more growth was occurring in rural areas) this indicator would signal a need for more in depth analysis to understand what other factors may be influencing the trend and what other trends are being influences by this growth pattern.

d. Assist in decision-making
   - ✓ Because growth is trending in the right direction it is easier to justify policies and help the region decide how to allocate resources. Is this enough of a positive trend that focus and resources can be shifted to other priority areas?

To determine if the indicator reflects what we would like to measure it should:

a. Gauge progress toward a desired regional result or outcome
   - ✓ This indicator will show if we are making progress towards the goal – Is growth is occurring in areas planned for growth?

b. Be understandable and transparent to most people
   - ✓ This indicator is transparent. Planning areas are clearly defined in the Regional Plan. Structures and housing units are updated annually by the CCRPC.

c. Drive multiple results
   - ✓ Analysis of other ECOS goals on transit use, housing, GHG emissions, etc. are linked to growth patterns.

d. Generate synergy across indicator categories
   - ✓ This indicator is linked to goals set for transportation patterns, housing creation, employment opportunities, natural resource conservation, and productivity of the working landscape.

e. Be actionable
   - ✓ Municipalities plan and enact zoning to insure that growth occurs in areas planned for growth.

To determine if the indicator is something that we are able to measure the data should be:

a. Affordable to gather
   - ✓ CCRPC gathers this data annually as part of ongoing organizational practices.

b. Produced by a trusted source
   - ✓ The CCRPC is a trusted source for data.

c. Available consistently over time to produce a trend
   - ✓ The CCRPC collects this data annually.

d. Available region–wide, but can be disaggregated to local areas for comparisons and mapping
   - ✓ The data is available at the county level and can be disaggregated to the municipal level.

e. Available, if possible, for other regions, states or countries for comparisons outside of the region
   - × The data is not available for other counties and at the state level.

BUILT ENVIRONMENT GOAL 1 - All future development will support, maintain, and reinforce Vermont's historic settlement pattern of compact hamlets, villages and urban centers separated by and harmonizing with working and natural rural countryside; adhere to sustainability principles of environmental quality, economic vitality, fiscal responsibility, and social and inter-generational equity.

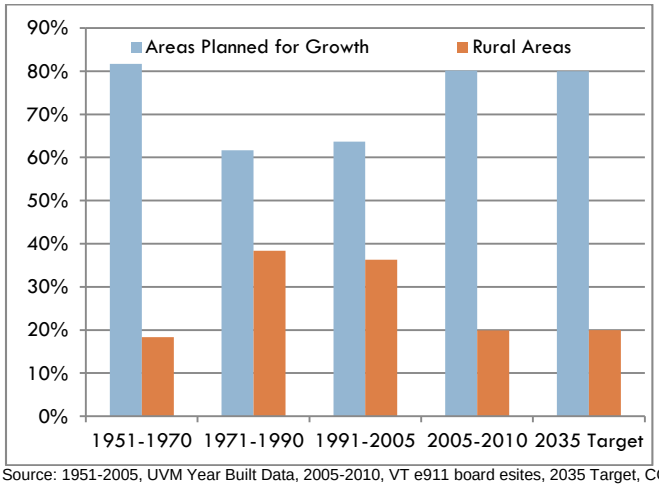
Key Issue - Why do we care? What is the problem?

- Over the past 60 years state and municipal development regulations has shifted growth away from the metropolitan areas around Burlington, to more suburban and rural locales.

- A continuing trend toward scattered development at low densities will result in worsening travel congestion, increased land consumed by development, increased cost of infrastructure/lack of infrastructure, and low social opportunity.

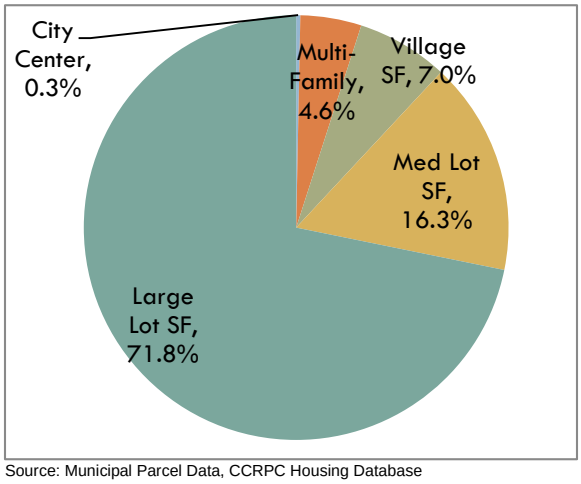
Key Indicators - How are we doing?

Percent of New Structures in Areas Planned for Growth: 1950 – 2010



Source: 1951-2005, UVM Year Built Data, 2005-2010, VT e911 board esites, 2035 Target, CCRPC

Land Consumption
71% of Land is consumed by Large Lot Single Family



Source: Municipal Parcel Data, CCRPC Housing Database

Other/Supporting Indicators

Total Housing Units and Employment by Planning Area

Median Lot Size by Planning Area

Development Density by Planning Area

Percent of total structures in State Designated smart growth centers

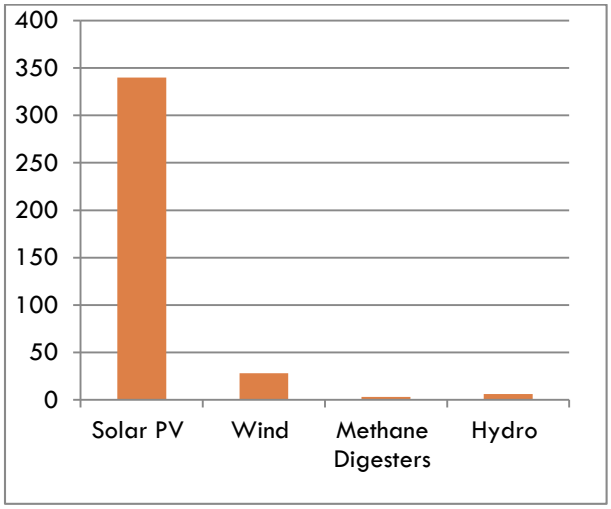
BUILT ENVIRONMENT GOAL 2 - Encourage and reward the generation and use of renewable energy sources and foster distributed environmentally responsible energy generation

Key Issue - Why do we care? What is the problem?

- Fuel combustion increases the atmospheric concentration of carbon dioxide and other greenhouse gases, which are the causes of global climate change.
- Climate change will have profound impacts on the environment, public health, infrastructure and the economy.
- The outflow of energy dollars serves as a drain on the state and Chittenden County's economy.

Key Indicators - How are we doing?

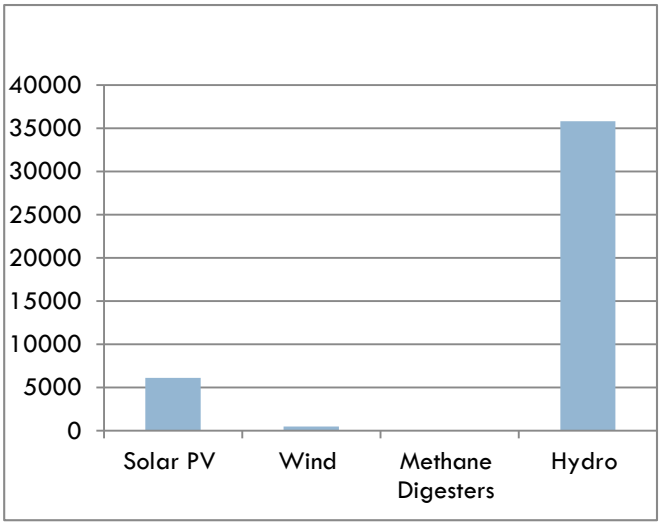
Chittenden County's renewable energy sites generating electricity.



Source: IBID, VT Energy Atals

Source: IBID, VT Energy Atals

System capacity of the sites in kW.



Other/Supporting Indicators

of renewable energy jobs

# of financial incentives available for generation and use of renewable energy

# of towns with comprehensive energy plans

and capacity of sites that use renewable energy sources for heat and hot water

BUILT ENVIRONMENT GOAL 3 - Ensure adequate future water supply and quality for all users.

Key Issue - Why do we care? What is the problem?

- Adequate water supply is needed to accommodate infill and redevelopment in areas planned for growth
- Water supply is good.

Key Indicators - How are we doing?

Champlain Water District has a capacity of up to 25 MGD (million gallons per day)

Champlain Water District's excess capacity at peak is __ MGD

The City of Burlington has a capacity of up to 7.5 MGD

Burlington's excess capacity at peak is 1.3 MGD

Other Supporting Indicators

Average annual daily water use

A recent employer survey revealed that water capacity rated the highest of 12 utility and telecommunication system factors.

Both utilities have won excellence awards from the USEPA's Partnership for Safe Water program.

BUILT ENVIRONMENT GOAL 4 - Ensure adequate wastewater supply

Key Issue - Why do we care? What is the problem?

- Adequate waste water capacity is needed to accommodate infill and redevelopment in areas planned for growth
- Waste water supply is good.

Key Indicators - How are we doing?

Treatment plants have an aggregate design treatment capacity of 19.05 MGD

CCRPC 2000 estimate of uncommitted aggregate reserve capacity = 3.7 MGD

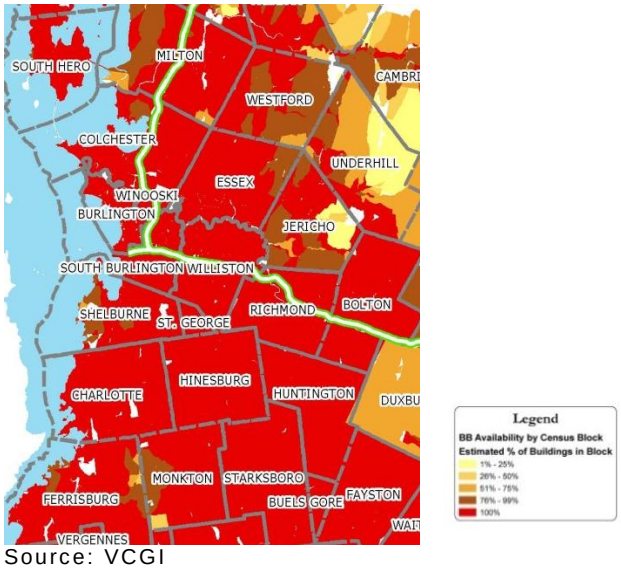
Other Supporting Indicators

BUILT ENVIRONMENT GOAL 5 – Ensure equal access to appropriate and affordable communication services for all.

Key Issue - Why do we care? What is the problem?

- The quality and cost of advance telecommunications (voice/data) services are average.
- The weakest part of the County's utility and telecommunications infrastructure is in the area of telecommunications. This is not just a problem for Chittenden County; rather, as for most largely rural areas, it has been a problem for the entire state.
- Because Chittenden County is the most heavily developed part of the state in terms of both population and business there is a particular focus on upgrading telecommunications in the County. The County already has a significant fiber optic capability (some currently dark) with many businesses already having T-1 capability.

Key Indicators - How are we doing?



Source: VCGI

89% of buildings are within 500' of street serviced by cable.

Other/Supporting Indicators:

of Drop Zones

Broadband speed

# of Public Internet Access Spots

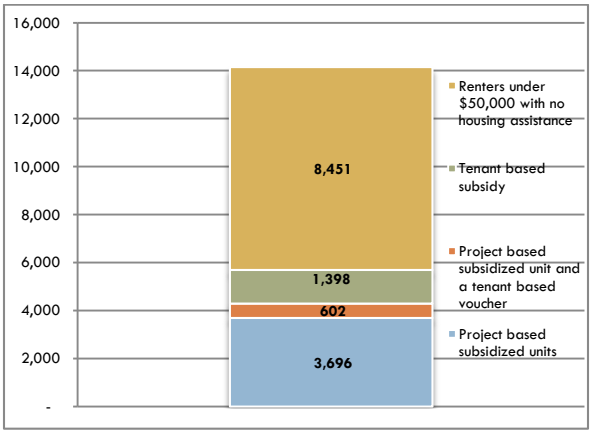
BUILT ENVIRONMENT GOAL 6 – Increase the opportunities for safe, decent, energy efficient, affordable, and fair housing for all types of households in mixed income neighborhoods.

Key Issue - Why do we care? What is the problem?

- Members of some protected classes do not have equal access to housing opportunities in Chittenden County.
- Nearly 60% of the county's housing stock was built before 1980—when lead-based paint was widely used, most home insulating, heating and energy technology was inefficient, and building and accessibility codes did not yet accommodate all types of residents.
- The financial burden of paying a mortgage, homeowners insurance, property taxes, utility expenses and other housing fees is unaffordable because they consume more than 30% of the household's income.

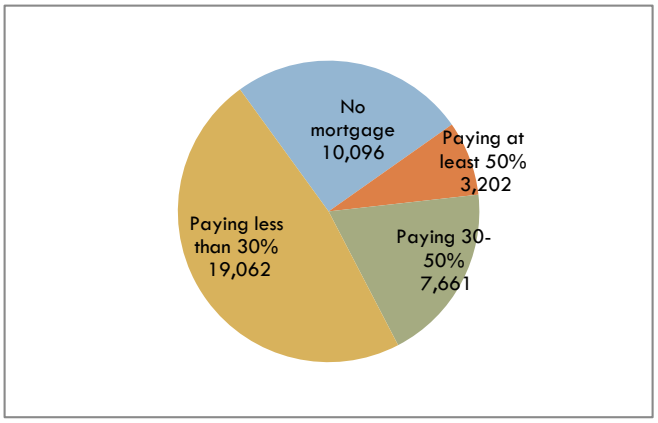
Key Indicators - How are we doing?

Fewer than half of the county's low income households received housing assistance, 2009



Source: Vermont Housing Data

% of Income Spent on Mortgage



Source: U.S. Census Bureau, American Community Survey '05-'09

Chittenden County households spending 30% or more of monthly income on housing is on par with the rest of the State of Vermont.

Other/Supporting Indicators

% of housing stock built before 1978

Homeownership rate by race

# of households in poverty

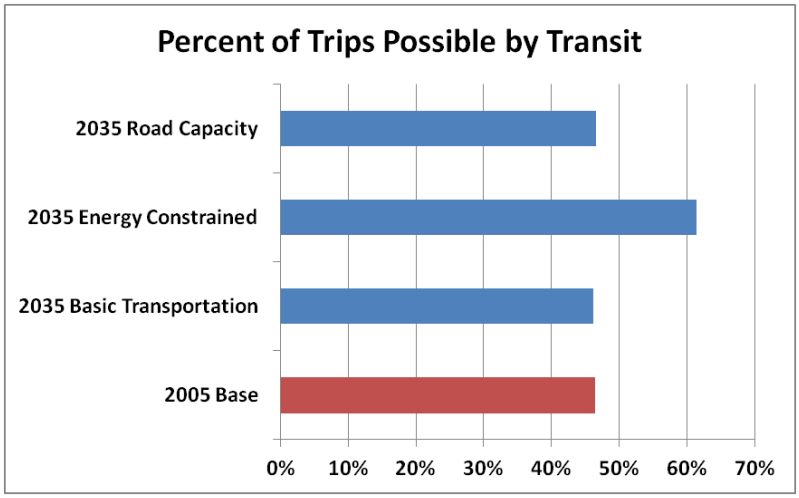
BUILT ENVIRONMENT GOAL 7 - Increase and improve the accessibility, affordability, safety, connectivity, security, social equity and choices of our regional and local multi-modal transportation system.

Key Issue - Why do we care? What is the problem?

- Examining the impacts of very different future transportation scenarios reveals worsening congestion regardless of transportation future. Less total travel (as measured by vehicle miles travelled (VMT)) can be somewhat reduced by a more transit/walking/biking friendly transportation future. See chart below.
- More trips able to be made by alternative modes leads to a more efficient transportation system.

Key Indicators - How are we doing?

Share of trips that can be made by more than one travel mode



Other/Supporting Indicators

- Mode share for work trips
- VMT per household
- Share of households within one half mile of bike paths/lanes
- Share of households within one half mile of a transit route
- Miles of sidewalks and shared use paths per capita
- Number of low income households within a 30 minute transit commute of employment centers
- Share of population that commutes more than 25 miles to work
- Number and severity of police reported bicycle and pedestrian crashes

BUILT ENVIRONMENT GOAL 8 - Increase the availability and accessibility of diverse, year round recreational areas and facilities, arts, and cultural opportunities for all residents and visitors

Key Issue - Why do we care? What is the problem?

- Cultural and recreational opportunities are important contributors to Chittenden County's high quality of life.

Key Indicators - How are we doing?

Number of cultural, arts, and recreational facilities per capita

Other/Supporting Indicators

Annual Attendance at cultural, arts, and recreational events

Investment per capita in cultural, arts, and recreation

BUILT ENVIRONMENT GOAL 9 - Maintain and develop energy production, transmission, and distribution infrastructure in Chittenden County that is more efficient, reliable, cost-effective, and environmentally responsible.

Key Issue - Why do we care? What is the problem?

- Reliable, cost effective and environmentally sustainable energy availability is critical to support the economy and households in Chittenden County
- Reliability and cost are good in Chittenden County relative to New England

Key Indicators - How are we doing?

Electric Utility Rates (per KWH)

Burlington	12.84 cents
CVPS	11.40 cents
GMP	10.48 cents
VEC	12.72 cents

Electricity Reliability – power outages

Other/Supporting Indicators

BUILT ENVIRONMENT GOAL 10 - Maintain our transportation system and improve its safety and efficiency.

Key Issue - Why do we care? What is the problem?

- The roadway condition of over half of the arterial highway mileage in Chittenden County is rated as poor or worse.
- Arterial congestion is growing faster than population or employment.

Key Indicators - How are we doing?

Percent of road miles by sufficiency rating

Crash rate per vehicle miles traveled

Other/Supporting Indicators

Transit service improvements – routes, frequencies, hours

Percent of bridges by sufficiency rating

Percent and total investment of Transportation Improvement Program funding allocated to maintenance/preservation projects

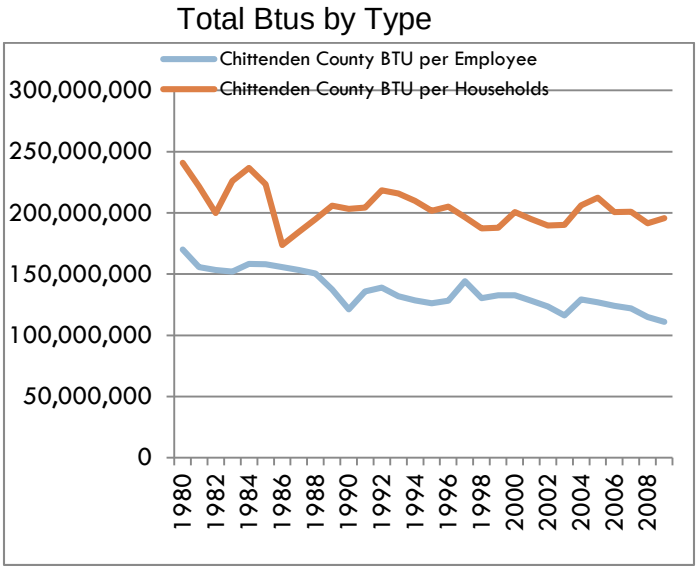
BUILT ENVIRONMENT GOAL 11 - Reduce energy consumption through energy conservation and efficiency

Key Issue - Why do we care? What is the problem?

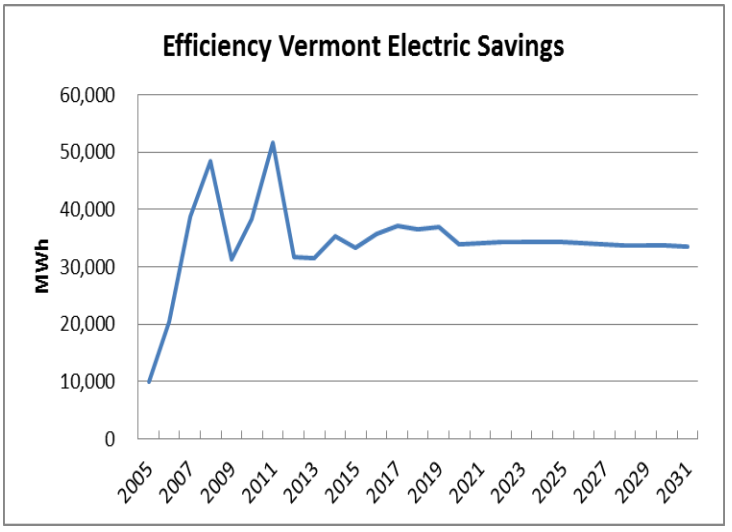
- Energy consumption in Chittenden County shows an overall increase in total energy usage in parallel to the population growth that the county has been experiencing. Trends vary by fuel type and sector (residential, commercial and industrial, and transportation).

- The per household or per employee energy consumption for several fuel types has shown a decline over the last 20 years, consistent with improvement in efficiency and more stringent

Key Indicators - How are we doing?



Source:From SC Powerpoint ask Elizabeth



Source: Efficiency Vermont Chittenden County Electric Savings

Other/Supporting Indicators

Total renewable energy as a % of total energy used

Countywide energy use by sector or by community

Total clean energy use from clean distributed sources as a % of total energy used

BUILT ENVIRONMENT GOAL 12 - Reduce the loss of life and property from natural and manmade hazards.

Key Issue - Why do we care? What is the problem?

- Chittenden County is the most likely to suffer damage to life and property from technological hazards due to the high number of residents dependent upon municipal and regional water, sewer, power, telephone and gas lines, as well as the high number of commercial and industrial facilities and their attendant storage for hazardous materials.

- In addition, Chittenden County is the most vulnerable to societal hazards due again to its relatively dense population and to its social and economic diversity.

Key Indicators - How are we doing?

1.5% of structures or 866 structures out of 58,598 structures are **within the Special Flood Hazard Area and Fluvial Erosion Hazard Area in 2012**

Annual deaths from weather related hazards

Annual injuries from weather related hazards

Annual property damage in dollars

Other/Supporting Indicators

Annual investment in hazard mitigation projects

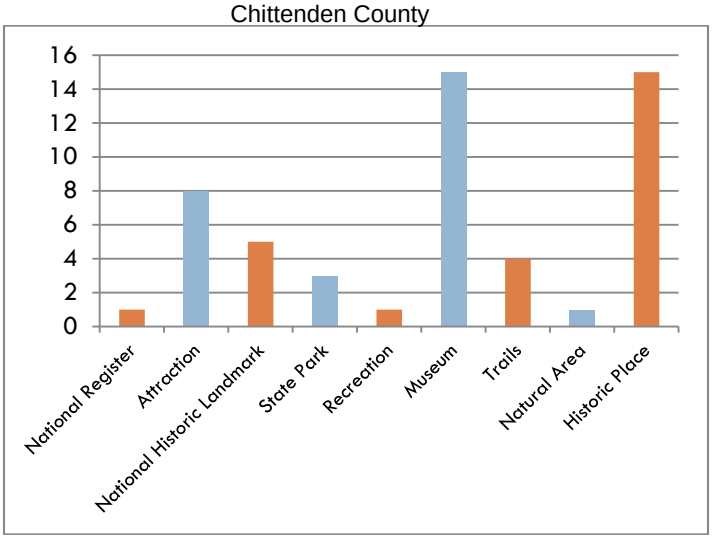
BUILT ENVIRONMENT GOAL 13 - **Respect, preserve, restore, interpret, and make accessible archeological and historic resources.**

Key Issue - Why do we care? What is the problem?

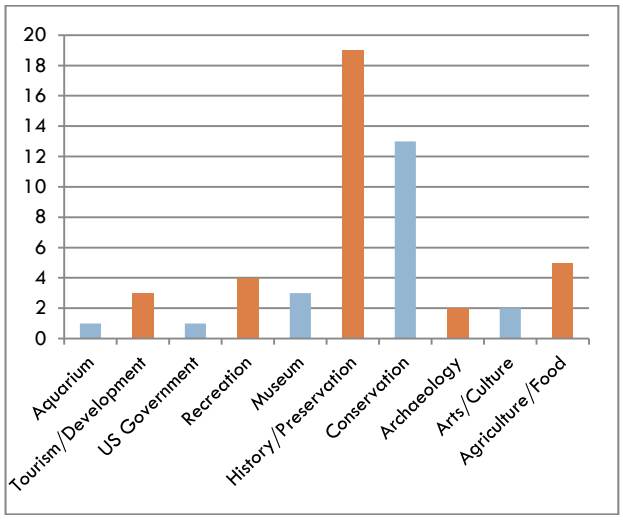
- Archeological and historic resources are important not only because they help define the region's identity and contribute to our quality of life, but also because they may perform important present-day functions and promote tourism

Key Indicators - How are we doing?

National Heritage Resources
Chittenden County



National Heritage Organizations
Chittenden County



Source: Champlain Valley National Heritage Partnership Management Plan

Other/Supporting Indicators

Number of historic and archaeological sites

Acres of historic and archaeological sites

ECONOMIC INFRASTRUCTURE GOAL 1 - Advance and develop key employer clusters. *(combine with #2 and 8?)*

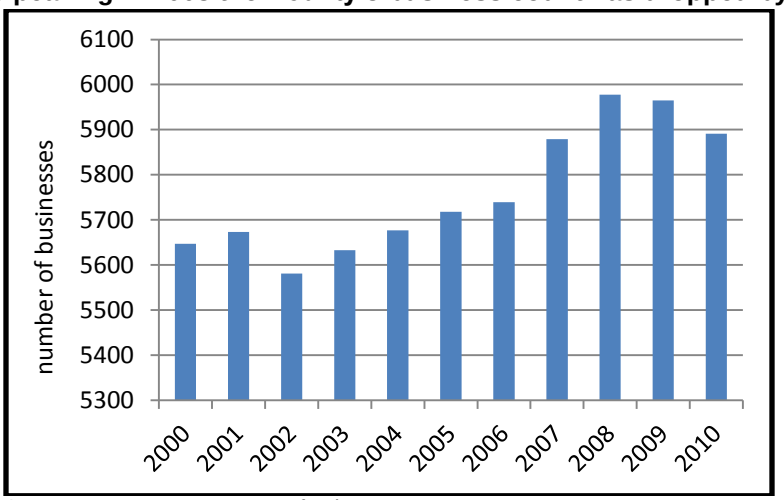
Key Issue - Why do we care? What is the problem?

- Chittenden County's total employment base is largely (68%) within six industry sectors: healthcare and social assistance; educational services retail trade; manufacturing; accommodation and food service; and professional, scientific and technical services.
- The number of subsectors with high location quotients shows a diversified employment base that offers opportunities for continued economic diversification and a broad base on which the County's economy can flourish.
- However, 46% of manufacturing employment is within one company (IBM)

Key Indicators - How are we doing?

Total number of businesses in Chittenden County:

Since peaking in 2008 the County's business count has dropped by 101



Source: Vermont Department of Labor

Largest Industry Sectors Employ 68% of total in Chittenden County

Industry Sector	Employment
Health care and social assistance	14,060
Retail trade	12,556
Educational services *	11,239
Manufacturing	10,744
Accommodation & food services	7,679
Professional, scientific & technical services	6,725
Total	63,003

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages, 2010
*Includes local and state government employment

Other/Supporting Indicators

ECONOMIC INFRASTRUCTURE GOAL 2 - Increase and support the development and recruitment of *existing and* new target sector employers and jobs. *(combine with #1 and 8?)*

Key Issue - Why do we care? What is the problem?

- The number of subsectors with high location quotients shows a diversified employment base that offers opportunities for continued economic diversification and a broad base on which the County's economy can flourish.
- A review of the location quotients of Chittenden County show those subsectors in which employment concentrations are above national averages, thereby showing a comparative industry advantage for employment and skill availability.

Key Indicators - How are we doing?

Location Quotients for Chittenden County by Three Digit NAICS Code *

Industrial Category and 3 Digit NAICS Code	Location Quotient (US=1.00)
NAICS 334 Computer and electronic product manufacturing	6.63
NAICS 454 Nonstore retailers	2.65
NAICS 339 Miscellaneous manufacturing	2.07
NAICS 451 Sporting goods, hobby, book and music stores	1.95
NAICS 515 Broadcasting, except internet	1.91
NAICS 453 Miscellaneous store retailers	1.78
NAICS 323 Printing and related support activities	1.65
NAICS 492 Couriers and messengers	1.51
NAICS 442 Furniture and home furnishings stores	1.50
NAICS 448 Clothing and clothing accessories stores	1.46
NAICS 621 Ambulatory health care services	1.40
NAICS 445 Food and beverage stores	1.35
NAICS 447 Gasoline stations	1.33
NAICS 562 Waste management and remediation services	1.28
NAICS 541 Professional and technical services	1.23
NAICS 332 Fabricated metal product manufacturing	1.17
NAICS 517 Telecommunications	1.16
NAICS 611 Educational services	1.14
NAICS 441 Motor vehicle and parts dealers	1.12
NAICS 444 Building material and garden supply stores	1.11
NAICS 236 Construction of buildings	1.10
NAICS 511 Publishing industries, except internet	1.10
NAICS 624 Social assistance	1.10

NAICS 238 Specialty trade contractors	1.07
NAICS 333 Machinery manufacturing	1.05
NAICS 335 Electrical equipment and appliance mfg.	1.05
NAICS 721 Accommodation	1.05
NAICS 813 Membership associations and organizations	1.04
NAICS 443 Electronics and appliance stores	1.01
NAICS 532 Rental and leasing services	1.00
NAICS 713 Amusements, gambling, and recreation	1.00

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages, 2010
* Includes only industries with Location Quotients over 1.00

Number of net new jobs by target industry sector

Number of net new companies in target sectors

Other/Supporting Indicators

ECONOMIC INFRASTRUCTURE GOAL 3 - Improve economic development, housing opportunities, and infrastructure (transportation, waste water, water, energy, telecommunications) in town centers, villages and other areas planned for development. *(see also Built Environment 1)*

Key Issues - Why do we care? What is the problem?

- Chittenden County has a good inventory of available buildings or partial space in buildings, with 388 buildings totaling nearly 2.9 million square feet.
- Chittenden County is currently modestly-supplied with land for business construction
- Chittenden County is well-served with a highway network that facilitates multi-directional, but will decline unless investments are made.
- The County is generally well-served with utilities and telecommunications services necessary to support economic development, but could improve the quality and costs of telecommunications, in particular cell phone service.

Key Indicators - How are we doing?

Available Building Space in Chittenden County

	Type of Space					
	Industrial		Office		Retail	
	# Buildings	Square Feet	# Buildings	Square Feet	# Buildings	Square Feet
Chittenden County Total	68	895,531	236	1,186,330	82	779,696

Source: Information from Real Estate Brokers Analyzed by Garnet Consulting Services, Inc., September, 2011

Land Available in Chittenden County Business Parks

	Developed Lots	Vacant Lots	Approx. Acres Available	Price Per Acre (Most Recent Sale)
Total	296	77	312	range from $57,000-$209,000

Source: GBIC, 2011

Other/Supporting Indicators

Amount of residential units permitted in areas planned for growth

Amount of non-residential building square footage permitted in areas planned for growth

Percent of land zoned for potential non-residential development in areas planned for growth

Net build-out capacity of non-residentially zoned land in areas planned for growth

Percent and $ of transportation investment in CC made in areas planned for growth

Percent of structures covered by broadband and cell phone service

ECONOMIC INFRASTRUCTURE GOAL 4 - Improve and broaden economic, employer, employee and workplace diversity.

Key Issue - Why do we care? What is the problem?

- Maintain economic diversity, and deepen existing sectors, seek even greater diversity.
- Entrepreneurial development is a core characteristic of the area, and needs to be nurtured.

Key Indicators - How are we doing?

Employment by Major Industry Sector 2010*

NAICS Code	Industry sector	Chittenden County	Vermont	U.S.
Private Sector		83.3%	82.0%	83.5%
62----	**Health care and social assistance**	**15.1%**	**15.9%**	**12.7%**
44----	**Retail trade**	**13.5%**	**12.9%**	**11.4%**
31----	**Manufacturing**	**11.5%**	**10.5%**	**9.0%**
72----	Accommodation & food services	8.2%	9.7%	8.7%
54----	**Professional, scientific & technical services**	**7.2%**	**4.6%**	**5.9%**
23----	**Construction**	**4.5%**	**4.6%**	**4.3%**
56----	Admin, support, waste mgt, remediation services	3.4%	3.0%	5.8%
42----	Wholesale trade	3.4%	3.2%	4.3%
52----	Finance & insurance	3.4%	3.0%	4.3%
81----	Other services (except public administration)	2.9%	2.9%	3.4%
51----	**Information**	**2.3%**	**1.8%**	**2.1%**
48----	Transportation & warehousing	2.2%	2.2%	3.1%
61----	**Educational services**	**2.2%**	**3.2%**	**1.9%**
71----	**Arts, entertainment & recreation**	**1.6%**	**1.3%**	**1.5%**
53----	Real estate & rental & leasing	1.2%	1.0%	1.5%
55----	Management of companies & enterprises	0.3%	0.3%	1.5%
22----	Utilities	0.3%	0.6%	0.4%
11----	Forestry, fishing, hunting, and agriculture support	0.1%	0.9%	0.9%
21----	Mining	0.0%	0.2%	0.5%
Government Sector		**16.7%**	**18.0%**	**16.5%**

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages

*__Bold__ indicate industry sectors for which Chittenden County employment percentages exceed the U.S. average. Data excludes members of armed forces, self-employed, proprietors, domestic workers, unpaid family members and railroad workers covered by the railroad unemployment systems

Other/Supporting Indicators

Percent of total wages by business sector

Total Employment Participation Rate in Private Industry by race & gender – 7% minority, 48% women

Median age of workforce by occupation

Women-owned firms in 2007 in Chittenden County = 28.2%, VT= 26%

ECONOMIC INFRASTRUCTURE GOAL 5 - Improve education, workforce education, and training.

Key Issue - Why do we care? What is the problem?

- The County's ability to grow its economy in the future will be closely tied to its ability to provide available skilled labor, particularly once the currently unemployed are absorbed back into the ranks of the employed as much as their skills will allow.
- The County's labor force has a relatively low unemployment rate and high labor participation rate, with many skills categories, particularly technical skills, reported as difficult to find or unavailable by area employers.
- Employers report very good to excellent workforce quality, with good work ethic and productivity, and low turnover and absenteeism.

Key Indicators - How are we doing?

Occupational Demand Currently and in One Year *

Occupational Sector	Current Need	Need in One Year
Office and Administrative Support	233	238
Professional/Technical	229	232
Production/Technical	333	353
Installation, Maintenance, and Repair	32	35
Transportation and Material Moving	51	78
Computer and Mathematical	142	179
Total	1,020	1,115

Source: WDGT Chittenden Employer Survey, September 2011
*As reported by 75 participating companies

% of training program participants who find a job in Chittenden County

Other/Supporting Indicators

% of high school students scoring high proficiency science and math

# of internship opportunities offered by industry type

# of internships that become full time positions

# of training programs offered for specific employers or industry sectors and # of people enrolled

Total # of graduates from training programs

30% of employers (largely within the skilled machine trades) report that they have training needs that are not met by local resources. Source: WDGT Chittenden Employer Survey, September 2011

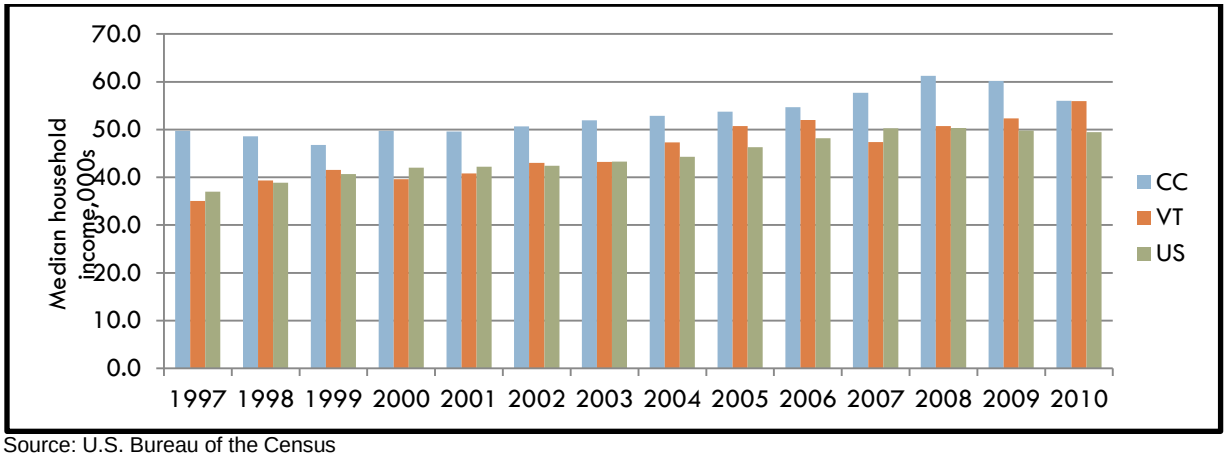
ECONOMIC INFRASTRUCTURE GOAL 6 - Improve the financial security of households.

Key Issue - Why do we care? What is the problem?

- Median household income in the County has declined for two consecutive years.
- Employment in the private sector declined between 2000 and 2010. This was offset in part by an increase in public sector employment, but it was not sufficient to offset private sector losses (private sector: -4,386 + public sector: 2,263 = net -2,123).

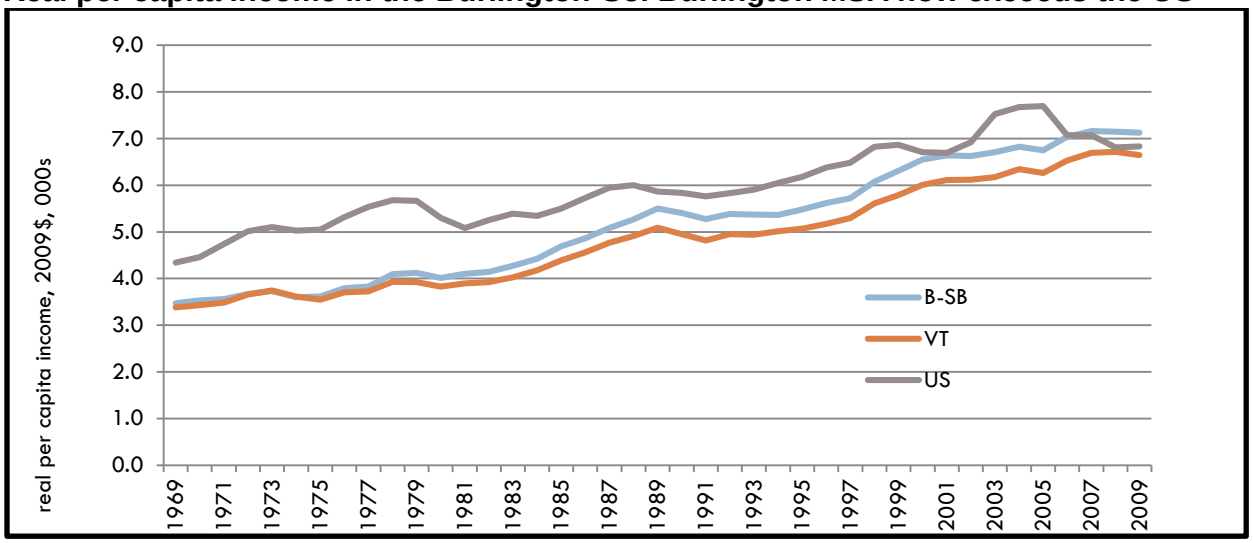
Key Indicators - How are we doing?

Median household income



Source: U.S. Bureau of the Census

Real per capita income in the Burlington-So. Burlington MSA now exceeds the US



Source: Bureau of Economic Analysis, (Jeff Blodgett calculations – note firm), January, 2012

Other/Supporting Indicators

percent of CC households spending more than 30% of monthly income on housing.

percent of CC households spending more than 45% of monthly income on housing and transportation

% total income earned in county by top 20% of incomes earned

Chittenden county household incomes in relation to Chittenden County cost of living index

median net worth and assets of households by income quintile

number of net new jobs in Chittenden County that pay greater than or equal to Chittenden County cost of living index

Percentage of children on free and reduced lunch

Percentage of county adult & youth population without health insurance

ECONOMIC INFRASTRUCTURE GOAL 7 - Increase local business ownership and entrepreneurial activities.

Key Issue - Why do we care? What is the problem?

- Local entrepreneurs fuel the local economy

Key Indicators - How are we doing?

Number of new business filings per year

Number of businesses with less than 10 employees

Other/Supporting Indicators

Number of post-secondary science and engineering students

Total $'s awarded in SBIR and STIR Grants

Total $'s awards in NIH grants

Total $'s leveraged by research and development tax credits

Dollars spent in locally owned businesses

Value of goods and services imported and exported

Gross licensing revenue from commercialized university research

Number of locally owned banks

ECONOMIC INFRASTRUCTURE GOAL 8 - Retain key employers and jobs.

(combine with #1 and 2?)

Key Issue - Why do we care? What is the problem?

- Retention and development of employers and jobs in Chittenden County increase wages and prosperity

Key Indicators - How are we doing?

4 largest industries by employment account for 57% of total employment in the County

	Employ.	% y-y	Avg qtrly wage	% y-y
Government	**15,930**	**-0.9**	**$11,832**	**3.4**
Health care	**13,972**	**-0.4**	**$11,415**	**2.1**
Retail	**12,270**	**1.5**	**$6,433**	**2.0**
Manufacturing	**10,587**	**0.2**	**$17,427**	**1.2**

Source: VT Department of Labor, 2011:Q2

Both jobs and labor force declined slightly from Oct to Nov in Chittenden County

	Nov. '11	Oct. '11	% m-m
Labor force	92,750	93,650	-1.0%
Total nonfarm employment	89,450	90,300	-1.0%
Number unemployed	3,350	3,350	0.0%
Unemployment rate	3.6%	3.6%	0.0%

Source: Boston Federal Reserve

Other/Supporting Indicators

NATURAL SYSTEMS GOAL 1 - Conserve, protect and improve the health of native plant, fish, and wildlife habitats.

Key Issue - Why do we care? What is the problem?

- Chittenden County continues to see forest fragmentation and loss of forest habitat largely due to mounting development pressures. Increasing incidences of land parcelization and subsequent forest conversion, lack of consistent subdivision regulations responsive to wildlife habitat concerns, and construction of transportation infrastructure including roads and trails continue to adversely impact forest integrity. In addition, acid deposition from air pollution, migration of invasive species including destructive insect species, and climate change continues to threaten native forest plant and animal habitat.
- Vermont water bodies continue to face mounting pollution pressures from increased development and agricultural activities. If these trends continue, unabated, the range of beneficial uses for select water bodies will be further limited. Further impairments could cumulatively have significant consequences for the health, stability and diversity of Vermont's aquatic life, as polluted water bodies become less hospitable to native species and invite the migration and colonization of invasive species. Changes in species composition will have broader implications for the native food chain for both aquatic and terrestrial species.

Key Indicators - How are we doing?

Local Zoning Lags Behind Plans*

Of 211 zoning bylaws reviewed in VT:

- ***88%** include conditional use standards (17% of which mention wildlife habitat)*
- ***75%** include site plan requirements (18% of which mention wildlife habitat)*
- ***51%** included some form of conservation district (49% of which mention wildlife habitat)*
- ***39%** include explicit riparian buffers (the average buffer width was 42 feet)*
- ***22%** include a forest reserve district (40% of which specifically mention wildlife habitat)*
- ***2%** of the municipalities include a specific definition of "wildlife habitat" in their zoning bylaws.*
- ***1%** (3 municipalities) include a wildlife habitat overlay district*

**Wildlife Considerations in Local Planning* – Vermont Natural Resources Council, February 2011

Source: *Wildlife Considerations in Local Planning*, Vermont Natural Resources Council, February 2011

Other/Supporting Indicators

Average parcel size of rural and suburban planning areas

Percentage of parcels over 50 acres that are subdivided (and thus lost) each year: While, Vermont as a whole has become more forested over the last half century, forest cover in Chittenden County has decreased. In particular, Chittenden County has lost over 25% of its core forest, which provides ideal habitat for wildlife species that are particularly sensitive to human disturbance, such as bear or moose (Source: Wildlife Considerations in Local Planning, Vermont Natural Resources Council, February 2011).

Number of invasive non-native insects and plants

Population of wood thrush

Number of invasive aquatic species: In 2008 there were 48 known aquatic invasive species in Lake Champlain (Source: State of the Lake and Ecosystem Indicators Report - 2008, Lake Champlain Basin Program).

% of Chittenden County that has been designated in a conservation/forestry district:

- In Chittenden County 26% of towns have a forestry district in their zoning. Of this 26% the average minimum lot size is 16.75 acres with the largest being 25 acres in Bolton and Huntington and the smallest is 10 acres in Jericho and Westford (Source: ECOS Natural Resources Analysis, Based on a review of zoning regulations of all the towns in Chittenden County).
- 58% of towns have a conservation district in their zoning. Of this 58% the average minimum lot size is 11.33 acres with the largest being 25 acres in Bolton and Huntington and the smallest .23 acres in Colchester (Source: ECOS Natural Resources Analysis, Based on a review of zoning regulations of all the towns in Chittenden County).
- 68,787 acres or 17% of Chittenden County has been identified as Most Suited for Natural Areas as part of CCRPC's open space planning project; of that 37,747 acres or 55% are on conserved lands (Natural Areas are rated by their ability to perform the following functions: exemplary natural communities; unfragmented landscape; refuge and habitat for rare and threatened species; lands with restoration potential; significant habitats for terrestrial wildlife; contribution to overall and representative biotic and physical diversity; water quality and aquatic habitats; and, stable rivers and subsurface water systems).

Average temperature as a trend: Between 1895 to 2007, the temperature in Burlington has averaged 44.7° Fahrenheit (F), but has been increasing by about one tenth of a percent per year for the last 50 years. Among the warmest ten years in Burlington since 1892, four have occurred since 1990. (Source: *Vermont in Transition: A Summary of Social, Economic and Environmental Trends*, Center for Social Science Research at Saint Michael's College, December 2008.)

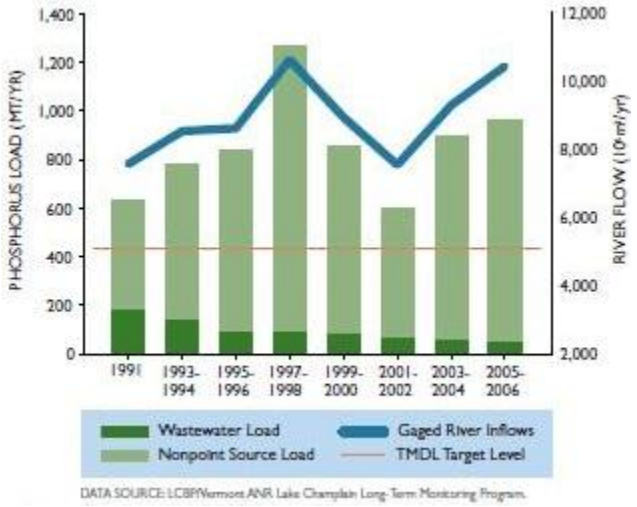
NATURAL SYSTEMS GOAL 2 - Conserve water resources and aquatic ecosystems; use clean water appropriately; protect and improve water quality, addressing Federal and State-identified pollutants of concern.

Key Issue - Why do we care? What is the problem?

- Vermont water bodies continue to face mounting pollution pressures from increased development and agricultural activities. Cumulative impacts from disappearing wetlands, channelization of streams and rivers, reduction and alteration of natural floodplains, increasing impervious surfaces, steady high pollutant levels and increasing nonpoint pollution sources, nutrient enrichment and sedimentation, reduction and elimination of vegetative buffers and climate change all threaten to further impair Vermont's waterways. If these trends continue, unabated, the range of beneficial uses for select water bodies will be further limited.

Key Indicators - How are we doing?

Total Phosphorus Load to Lake Champlain Compared to River Flow



Source: State of the Lake and Ecosystem Indicators Report - 2008, Lake Champlain Basin Program

Other/Supporting Indicators

Number of impaired rivers/streams: 60.13 miles or 4% of all stream miles within Chittenden County are considered impaired.

Stormwater Impaired Waterways (Source: CCRPC Regional Plan):

Watershed	Municipality
Allen Brook	Williston
Bartlett Brook	South Burlington
Centennial Brook	South Burlington

Englesby Brook	Burlington
Indian Brook	Essex / Essex Junction
Morehouse Brook	Winooski
Munroe Brook	Shelburne
Potash Brook	South Burlington
Sunderland Brook	Colchester / Essex

Miles of river, streams, lakes with riparian buffer zones as a percentage of total miles

Acres of impervious surface: Impervious cover in Chittenden County increased by approximately 17,094 acres or 4.3% 1992 to 2006 (USGS National impervious surfaces data).

Acres of wetlands: Mapped wetlands in Chittenden County decreased by approximately 4,954 acres or 1.25% from 1992 to 2006 (USGS National land cover data).

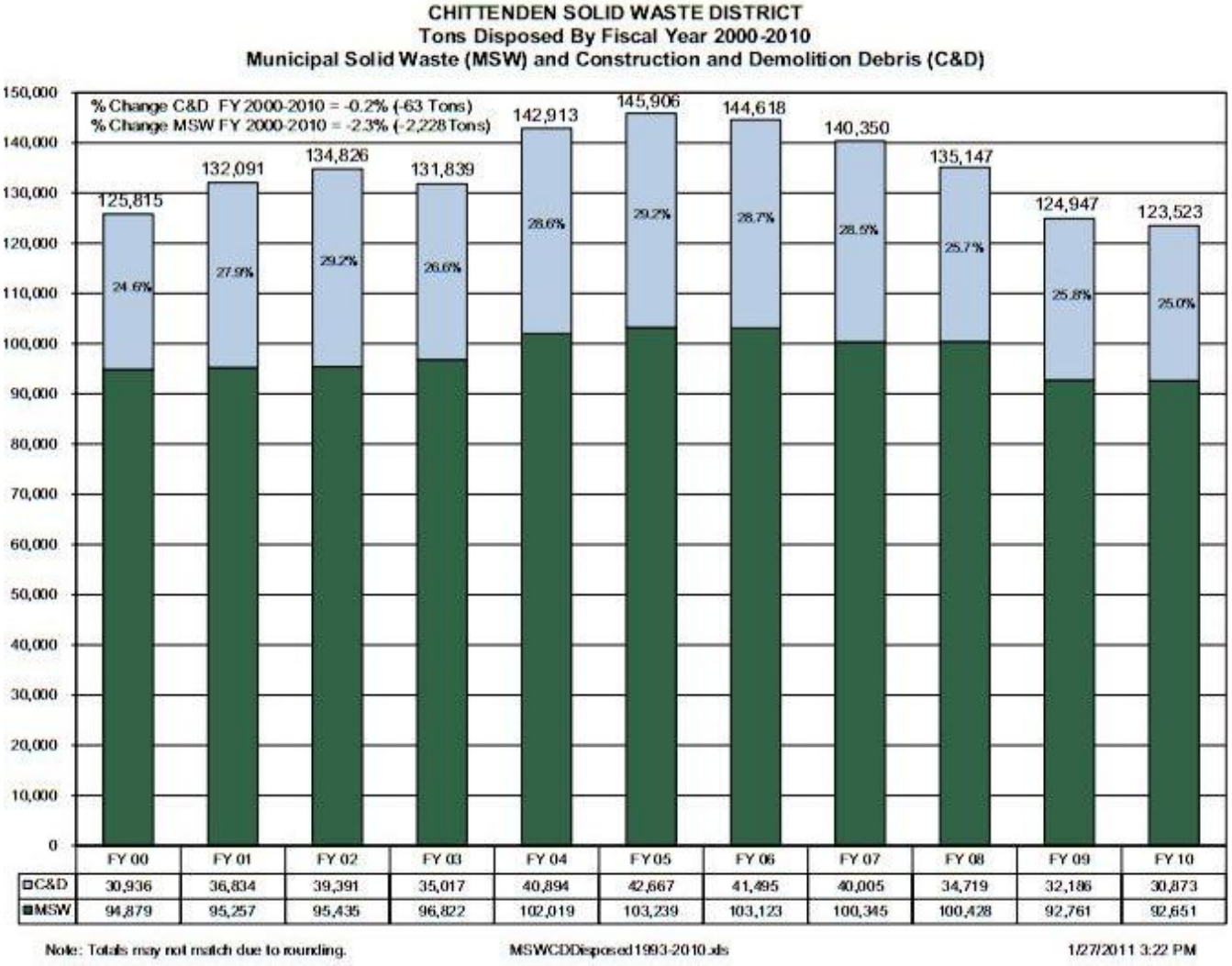
NATURAL SYSTEMS GOAL 3 - Decrease materials consumption and increase the use of renewable resources, resource recovery and recycling.

Key Issue - Why do we care? What is the problem?

- Tons of refuse disposed in Chittenden County has been declining over the last 5 years, while the amount of recycled materials has increased.

Key Indicators - How are we doing?

Waste diversion as a percentage of total countywide generation: NOTE: the tons of recycled materials displayed in a red line over the top of this chart will be helpful. The target would be to get the disposed materials to continue to decline, while the recyclables line increases.



Source: Chittenden Solid Waste District, FY2010 Annual Report

Other/Supporting Indicators

Total countywide generation per capita and by sector

NATURAL SYSTEMS GOAL 4 - Enable access to and appropriate use of open land and recreational resources, both public and private.

Key Issue - Why do we care? What is the problem?

- Maintaining and improving recreational access in Chittenden County is important for our quality of life.

Key Indicators - How are we doing?

Acres of private and public conserved land open to the public
Source: UVM SAL Conserved Land Database

Other/Supporting Indicators

Acres of Conserved Land Private and Public (Source: UVM SAL Conserved Land Database)

17% of Chittenden County is conserved land, 87% of which is available for public access. Over three-quarters of land in Chittenden County is in private ownership, with more than half associated with a dwelling.

NATURAL SYSTEMS GOAL 5 - Improve collaboration with neighboring communities, counties, and state regarding protection of important natural features and environmental systems.

Key Issue - Why do we care? What is the problem?

- The ECOS Natural Resources Analysis Report is organized based on an ecological systems thinking approach: a multidisciplinary, holistic approach to understanding our natural and built environment, in which we look at the complex relationships between living elements (such as vegetation and soil organisms) and nonliving elements (such as water and air) of a particular area to understand the aggregate whole or ecosystem. In that same way, we must look beyond our municipal, county and state political boundaries to understand the impacts, both positive and negative, we have on each other. With these insights we can consciously adjust our actions in a measured fashion in support of ecosystem health.

Key Indicators - How are we doing?

% of County municipalities with comprehensive integrated water, air and land use plans adopted as part of the regional plan

Source: Municipal Plans and CCRPC's Regional Plan

Other/Supporting Indicators

NATURAL SYSTEMS GOAL 6 - Preserve native soils and clean up contaminated soils.

Key Issue - Why do we care? What is the problem?

- Reduction of native soils, and the increase of impervious surfaces limits stormwater absorption capacity and filtration resulting in degradation of ecological systems; and reduces soils available for agricultural practices.
- Vermont has many properties that have, or used to have, tanks that held fuel oil or gasoline. Leaks or spills from these tanks can contaminate soil, water and even air.

Key Indicators - How are we doing?

new acres of pervious surface set aside by planning area of municipality per new acres of impervious surface
Source: Data needs to be developed

Other/Supporting Indicators

acres of impervious surface by planning area – Do we have this information

acres of remediated brownfields – ANR Database does not include acres, and I'm not sure this is a complete database:

Site#	Site Name	Site Address	Site Town	Site County	Priority	Discovery Date	Closure Date
20012892	131 Battery St	131 Battery St	Burlington	Chittenden	MED	6/25/2001	
20083807	134 Archibald St.	134 Archibald St	Burlington	Chittenden	LOW	8/29/2008	
20033098	151 South Champlain St. - Blinn House	151 South Champlain St.	Burlington	Chittenden	LOW		
20093899	157 South Champlain Street	157 South Champlain Street	Burlington	Chittenden	LOW	1/21/2009	
20083805	Browns Court	0 Browns Court	Burlington	Chittenden	LOW	8/29/2008	
931359	Former Gracie Roofing	87-111 Archibald St	Burlington	Chittenden	LOW	1/1/1993	
20063540	Gosse Court Armory	126 Gosse Court	Burlington	Chittenden	LOW	6/1/2006	10/25/2006
20104040	Intervale Community Food Enterprise Cent	0 Intervale Road	Burlington		MED	3/31/2010	
20053357	Moran Plant	Lake St	Burlington	Chittenden	MED	6/10/2005	
770144	Vermont Transit	343 N. Winooski	Burlington	Chittenden	COC	1/21/2000	3/10/2003
20104037	3 Maple Street	3 Maple Street	Essex		MED	1/15/2010	

Source: ANR Brownfields Database

Number of acres in organic agriculture as a % of total acres in agriculture

NATURAL SYSTEMS GOAL 7 - Protect and enhance working landscapes specifically agricultural (including local food production) and forestry land uses.

Key Issue - Why do we care? What is the problem?

- Protecting Vermont's working landscape is important for land-based production opportunities. Tourism may also suffer as the historically, rural character of the region gradually disappears. The conversion of farms and forestland for development has increased dramatically, far outpacing population growth.
- Forest fragmentation and increased parcelization have meant that the number of parcels has gone up, while their size has gone down, diminishing their economic viability and the ecological services they provide.
- Future land-based opportunities, for farming and forest based products in particular, may become more limited as suitable open land becomes less available. This has far reaching consequences for the future of Vermont's local economy.

Key Indicators - How are we doing?

Average parcel size of rural and suburban planning areas [Note: need numbers based on Planning Areas]:

The average parcel size in Chittenden County is 6.93 acres, while the parcel size that occurs most frequently (or mode) is 1 acre. The number of parcels greater than 50 acres (a size considered economically and ecologically viable) decreased by 1% between 2003 and 2009.

Source: Informing Land Use Planning and Forestland Conservation Through Subdivision and Parcelization Trend Information – Vermont Natural Resources Council, September 2010

Other/Supporting Indicators

Percentage of Chittenden County in current-use program: In 2009, 34% of privately owned land in Chittenden County was enrolled in Use Value Appraisal (UVA—a program allowing land to be taxed based on its income producing potential from agriculture or forestry); of that, 54% was on land >50 acres. (Source: *Informing Land Use Planning and Forestland Conservation Through Subdivision and Parcelization Trend Information* – Vermont Natural Resources Council, September 2010)

Number acres of prime ag soils under conservation

Number acres of prime ag soils by planning area

Conversion rate of farms and forests to other use: Working landscapes (farming, forestry, sand and gravel) comprise up to 25% of Chittenden County's land area, a decrease of 5% since 2003 due to residential development. Chittenden County lost nearly half its dairy farms in a 10-year period (1997-2007). In 2008, 21.7% of land in Chittenden County was used for farming. Cropland decreased by over 40% in a 20 year period (1987-2007), but the number of farms has increased by 189 due to the increase of smaller farms dedicated to local food production. (Source: 2013 Draft Chittenden County Regional Plan)

In 2000, Vermont forest products businesses processed 927,811 cords of wood; in 2008 they processed 584,150, a 37% drop in 8 years. The number of mills in Vermont has declined 43% from 185 in 2002 down to 105 in 2008. [NOTE: Need Chittenden County figures]

Types of Farm Enterprises in Chittenden County

Type of	1987		1997		2007		1987-2007 Change	
Farm Enterprise	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Individual Family	393	86.95%	372	81.58%	482	81.56%	89	22.65%
Partnership	41	9.07%	47	10.31%	47	7.95%	6	14.63%
Family-Held Corporation	13	2.88%	23	5.04%	40	6.77%	27	207.69%
Non-Family Corporation	1	0.22%	5	1.10%	6	1.02%	5	500.00%
Other	4	0.88%	9	1.97%	16	2.71%	12	300.00%
Total	452	100.00%	456	100.00%	591	100.00%	139	30.75%

Source: CCRPC Regional Plan

Reported annual sales from Chittenden County farms by size and type [Note need annual sales from forestry and forestry related industries as well]: While the number of farms in Vermont is increasing, almost 60% of them reported annual sales under $10,000 in 2007. 62% of farms in Chittenden County reported annual sales of under $10,000 (Source: USDA Census of Agriculture 1997 - 2007)

Percentage of Chittenden County land that has been identified as Most Suited to Agriculture: 28,211 acres or 7% of Chittenden County has been identified as Most Suited Agricultural Land[15] as part of CCRPC's open space planning project; 5,382 acres or 19% are located on conserved lands (Source: *Vermont's Wildlife Action Plan*, Vermont Fish & Wildlife Department, Waterbury, VT 2005)

NATURAL SYSTEMS GOAL 8 - Protect the valued scenic and recreational resources of the mountains, forests, lakes, rivers, and other natural areas.

Key Issue - Why do we care? What is the problem?

- Scenic resources represent an important element of the region's landscape and contribute directly to sense of place, quality of life and economic vitality through tourism and by attracting new residents and businesses. The scenic economy is one part of the region's overall attraction and generates significant local revenues. Locations with scenic beauty are also often places that display high values for ecological systems and intact landscapes. Thus such lands may be more sensitive and more vulnerable when and if development changes are proposed.
- We cherish our mountain, field and lake vistas - yet these are places where new subdivisions, energy development and second homes are often sited. Ironically, scenic resources are often undervalued and unprotected, although when projects are proposed that might impact or alter vistas and scenery there is often strident and vocal opposition to change, even if a project is proposed for lands under private ownership. This paradox needs to reconciled if, for example, the region continues to develop new infrastructure for energy generation and transmission, or if communities want to effectively balance scenic resource protection with growth and land based economic development.

Key Indicators - How are we doing?

of towns with mapped scenic resources or scenic overlay: 21% of towns have a scenic overlay/preservation district
Source: ECOS Natural Resources Analysis Report

Other/Supporting Indicators

of identified scenic resources that are fully protected [Note more research is needed].

# of recreational acres

# of municipal plans that highlight the importance of scenic resources and have specific zoning and regulatory standards: 16% of towns reference scenic resources but provide no goals, standards, guidelines, or recommendations. (Source: ECOS Natural Resources Analysis Report)

NATURAL SYSTEMS GOAL 9 - Reduce emissions of Federal and State-identified local and global air pollutants, and greenhouse gases.

Key Issue - Why do we care? What is the problem?

- Air quality monitoring confirms that Chittenden County's air quality meets the National Ambient Air Quality Standards (NAAQS), the federal regulations that set the maximum acceptable pollutant levels. But ground-level ozone levels are close to the current national standard and fine particle pollution (PM2.5) has approached the standard in recent years. Current ozone levels exceed the stricter standard recently proposed by the US Environmental Protection Agency.
- Transportation is the single largest source of greenhouse gas emissions in the state (44%).
- 71% of Chittenden County household trips are made by car. Over 75% of employees residing in the Chittenden County drive alone to work.

Key Indicators - How are we doing?

Greenhouse Gas Emissions by Sector

2006 Greenhouse Gas Summary

Greenhouse Gas			Greenhouse Gas Emissions	
Source	Type[a]	Global Warming Potential[b]	Metric Tons of Carbon Equivalents[c]	% of Total
Fossil Fuel Combustion				
Residential	CO_2	1	351,079	18.50%
Commercial	CO_2	1	131,266	6.90%
Industrial	CO_2	1	130,768	6.90%
Transportation	CO_2	1	816,854	44.90%
	CH_4	21	3,835	(included above)
	NO_2	310	32,045	(included above)
Electric Utility	CO_2	1	15,750	0.80%
Biomass Combustion	CO_2	1	187,582	9.90%
Domestic Livestock & Managed Wildlife	CH_4	21	167,883	3.90%
Animal Manure	CH_4	21	2,824	0.15%
Nitrogen Fertilizer Usage	NO_2	310	920	0.05%
Land Use Changes				

New Forest Growth	CO_2	1	-19,457	-1.00%
Wetland Drainage	CO_2	1	1	0.00%
	CH_4	21	-19	(included above)
Total			1,895,597	100.00%

State of Vermont Historical and Reference Case Greenhouse Gas Emissions
All numbers in million metric tons of CO2 equivelant emissions

Source: Chittenden County Regional Planning Commission, work is expected to be completed Summer 2012

Other/Supporting Indicators

Total Countywide Greenhouse Gas Emissions (Source: Chittenden County Regional Planning Commission, this will be updated in Summer 2012)

SOCIAL COMMUNITY GOAL 1 - Ensure physical access to the built environment (buildings and transportation) for all people.

Key Issue - Why do we care? What is the problem?

- About 14,000 people in Chittenden County were identified as disabled in 2010. Income of people with disabilities is far below that able bodied population, reducing their ability to afford housing and further limiting their housing choices.
- Home modifications depend on the Vermont Center for Independent Living's (VCIL) Home Access Modification program, due to limited funding only an average of six modifications were completed per year for the past three years.

Key Indicator

% of subsidized housing rental units that are accessible

Other/Supporting Indicators

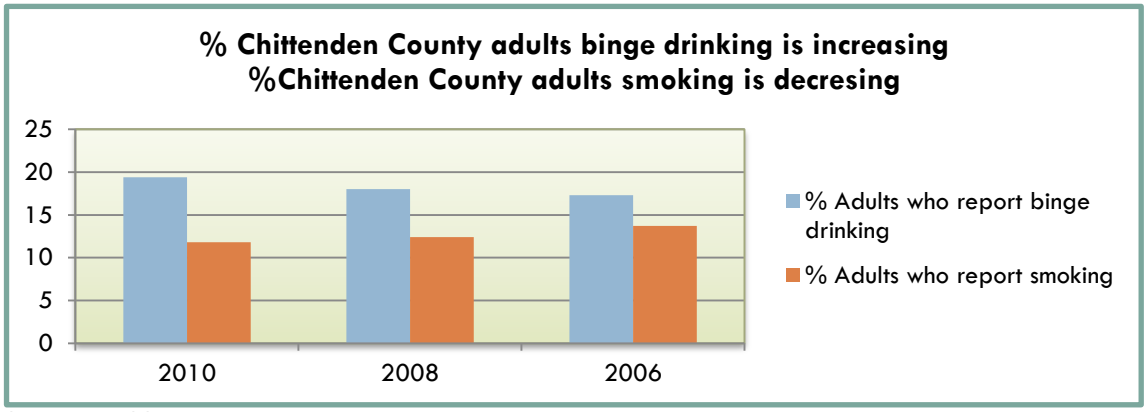
Ratio of demand for accessible housing/supply of accessible housing

SOCIAL COMMUNITY GOAL 2 - Decrease the proportion of residents engaging in unhealthy behaviors such as smoking and binge drinking.

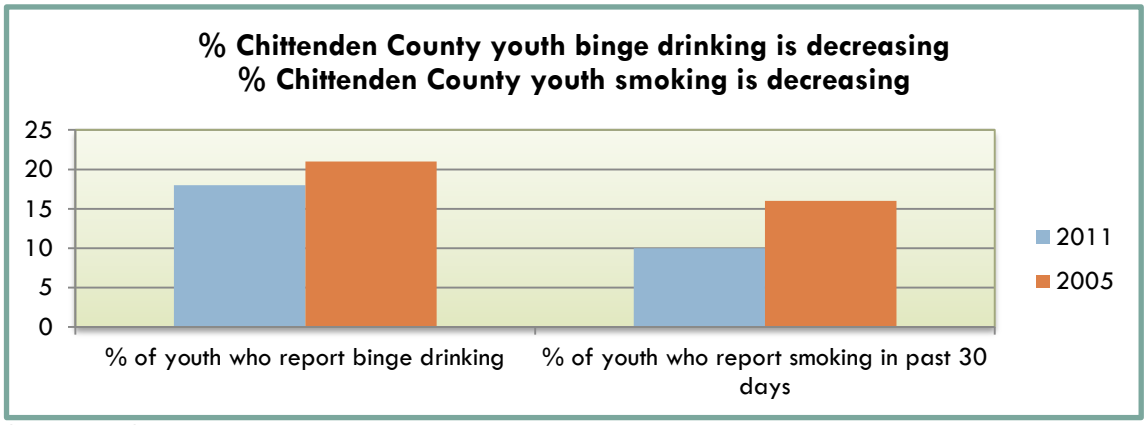
Key Issue - Why do we care? What is the problem?

- Tobacco is still the leading cause of preventable death.
- Alcohol consumption is a leading cause of preventable fatalities and is a predictor of domestic violence.

Key Indicators - How are we doing?



Source: BFRSS



Source: YRBS

Other/Supporting Indicators

Density of alcohol outlets

Age when a person starts drinking

Age when a person starts smoking

SOCIAL COMMUNITY GOAL 3 - Improve the ability of Chittenden County residents to access safe, affordable, healthy food especially locally produced.

Key Issues - How are we doing? What is the problem?

- Residents in communities with a more "imbalanced food environment" have more health problems and higher mortality than residents of areas with a higher proportion of grocery stores, when other factors are held constant.

Key Indicators – How are we doing?

produce-carrying stores and farmers markets in proximity to residential E911 points = distance to healthy food source
Source: CCRPC GIS mapping

% adults that report eating five or more fruits or vegetables per day
Source: BRFSS

% youth that report eating five or more fruits or vegetables per day
Source: YRBS

Other/Supporting Indicators

% fresh locally-produced food served at county facilities and institutions (schools, hospitals) Source: would have to be analyzed

Total annual sales at farmers markets Source: NOFA

# of eligible people who receive Vermont Farm to Family WIC Coupons, Seniors coupons
Source: Agency of Human Services

# of community gardens located in 1/2 mile of E911 residential points, or # of community gardens per capita by town Source: CCRPC GIS mapping

SOCIAL COMMUNITY GOAL 4 - Increase the ability of residents to engage in physical activity.

Key Issues - Why do we care? What is the problem?

- Achieving and keeping a healthy weight requires a balanced, lower-calorie diet and more physical activity. Even modest weight loss for people who are overweight can lower risk for chronic disease.

Key Indicators - How are we doing?

% adults who participate in regular, moderate physical activity
Source: BRFSS

% youth who participate in regular, moderate physical activity
Source: YRBS

Other/Supporting Indicators

% of county schools that have PE requirements K-12
Source: would have to be analyzed by VDH

# of recreational opportunities in proximity to residential E911 points
Source: CCRPC GIS mapping

SOCIAL COMMUNITY GOAL 5 - Improve public safety.

Key Issue - Why do we care? What is the problem?

- The cost of emergency response and crime prevention is a challenge to municipalities.
- Perhaps the most immediate, dramatic, and costly consequences of increasing physical impairment to our waterways will be the arrival of more frequent and more destructive flood events across the state, the magnitude of which we have seen in recent years.

Key Indicators - How are we doing?

Crime by type Chittenden County vs. Vermont 2009		
Offense Type*	Chittenden County	Vermont
Total	9973	29816
Murder	1	7
Robbery	30	112
Forcible Rape	30	123
Sex Assault	2	3
Arson	20	76
Burglary	751	3370
Theft from Motor Vehicle	1232	2827
Larceny	1196	4063
Stolen Property	61	201
Drug/Narcotic Violations	322	715
Notes: *not all types reported in this table. Source: Vermont Crime Information Center Online		

Other/Supporting Indicators

SOCIAL COMMUNITY GOAL 6 - Increase active individual and organizational participation in all levels of government by ensuring that government processes are open, transparent, and accessible.

Key Issue - Why do we care? What is the problem?

- A Bi-annual Diversity Engagement Dinner was held on November 30, 2011 as part of the Social Equity Investment Project, hosted by the City of Burlington and the ECOS Project. In attendance were sixty-two community members, 98% of which were racially and ethnically diverse (44 adult and 16 youth). The feedback that was received included the need for more inclusivity and multicultural input in government planning and policy initiatives in order to combat racism and gain appreciation of our racially and ethnically diverse populations, rather than mere tolerance.

Key Indicators - How are we doing?

% of eligible voters that vote

% General Election Voter Turnout

	2004	2006	2008	2010
Chittenden County	69%	59.9%	70.2%	52%
Vermont	70.7%	60.7%	72%	54%

Source: Vermont Secretary of State. http://vermont-elections.org/elections1/election_info.html

Other/Supporting Indicators

% minority populations serving on town and school boards

Source: Primary data collection

% women serving on town and school boards

Source: Primary data collection

SOCIAL COMMUNITY GOAL 7 - Increase opportunities for underserved populations to access and contribute to arts and cultural activities.

Key Issue - Why do we care? What is the problem?

- There are major social, health, economic and environmental benefits in developing opportunities for and participation in arts and cultural activities.

Key Indicators – How are we doing?

Participation #'s in cultural activities by income level and race
Source: Primary data collection by Burlington City Arts

Other/Supporting Indicators

SOCIAL COMMUNITY GOAL 8 - Increase access to social services.

Key Issue - Why do we care? What is the problem?

- Lower income Vermonters report higher rates of depression and chronic conditions, such as obesity, asthma, heart disease, stroke and diabetes.
- In 2008, 21% of Chittenden County residents were living at less than 200% of the federal poverty level, many receive state and federal assistance to meet basic needs.
- "Access to viable transportation options, both public and private, is lacking for refugees in Vermont. This gap acts as a significant barrier in the adaptation of refugees to their new homes and their acculturation to their new host communities. Furthermore, limited transportation options can in substantial ways restrict the autonomy and independence of refugees, leaving them dependent on the services and schedules of others, which in turn can adversely affect their ability to seek and secure gainful employment, receive necessary medical care, and access other goods and services vital to survival, such as food and clothing." *Transportation, Equity, and Communities at Risk: Refugee Populations and Transportation Accessibility in Vermont* UVM Transportation Research Center Report #10-018, Pablo S. Bose PhD, March 2011.

Key Indicator – How are we doing?

% of population eligible to participate in 3 Squares Vermont who participate
Source: Vermont Agency of Human Services

# of service providers (primary care physicians) within walking distance to public transit
Source: Indicator will need to be developed by VDH and CCRPC GIS mapping

Other/Supporting Indicators

SOCIAL COMMUNITY GOAL 9 - Provide diverse recreational and cultural opportunities for all residents.

Key Issue - Why do we care? What is the problem?

- People living in highly walkable, mixed-use communities are more than twice as likely to get 30 or more minutes of daily exercise as those living in auto-oriented, single-use.
- Older children and youth who have access to quality out-of-school and summer opportunities are more likely to develop the skills they need for performing well in school and stay engaged in school.

Key Indicator – How are we doing?

per capita spending on recreational opportunities
Source: Primary data collection from line items in town budgets

per capita spending on cultural opportunities
Source: Primary data collection from arts organizations

Other/Supporting Indicators

SOCIAL COMMUNITY GOAL 10 - Provide youth with high-quality education and social supports.

Key Issue - Why do we care? What is the problem?

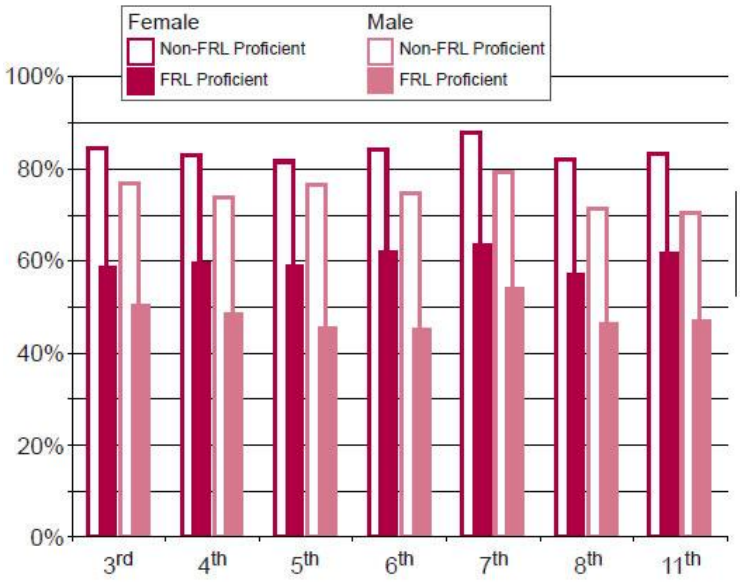
- Statewide averages of the 2008-2009 NECAP results indicate that a significant proficiency gap exists between students who live in poor and low-income households and those who do not.
- Further analysis shows that there is a significant gap between male and female students and students who are white and those who are non-white.

Key Indicator – How are we doing?

NECAP proficiency GAP disaggregated by Free and Reduced Lunch status, gender, race, disability, English language proficiency, and migrant students.

Reading Proficiency Gap Evident from Grade Three On

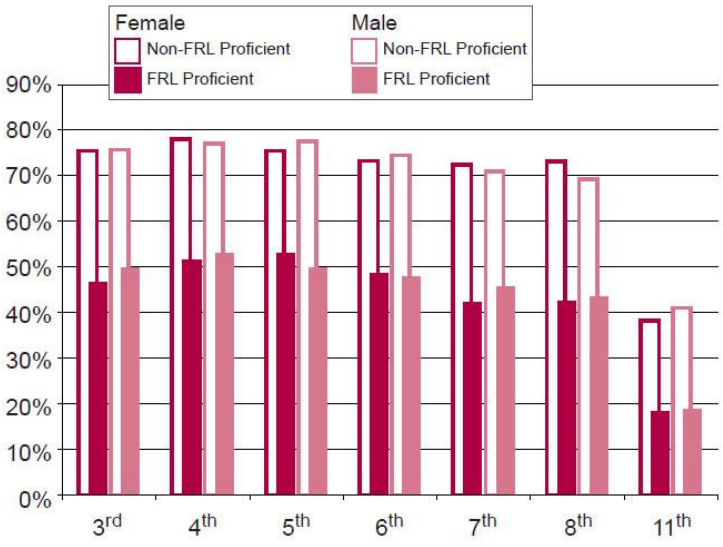
2008-2009 NECAP Reading Results by Grade, Gender and FRL Status



Source: Voices for Vermont's Children

Math Proficiency Gap Persists - High School Performance Troubling for All Students

2008-2009 NECAP Math Results by Grade, Gender and FRL Status



Source: Voices for Vermont's Children

* *Note:* Further analysis needs to be done to disaggregate proficiency gap analysis by race and English as a second language status.

Other/Supporting Indicators

% of Chittenden County families paying more than 25% of income towards child care by race and gender

% of Chittenden County families eligible for subsidized child care on waiting list by income, gender, and race

% Chittenden County children with early grade reading mastery by income, gender, and race

% Chittenden County children enrolled in early childhood development programs by income, gender and race

% Chittenden County middle school age children who are held back by income, gender, and race

% Chittenden County middle school students who participate in after school programs (not including sports) Source: United Way

% of Chittenden County high school graduates that attend post-secondary institutions, training, or apprenticeship programs

Chittenden County graduation rates disaggregated by income, gender, race, FRL, English language proficiency, and migrant status. Source: US Census

SOCIAL COMMUNITY GOAL 11 - Provide lifelong learning opportunities for all.

Key Issue - Why do we care? What is the problem?

- 42% of Vermonters who have less than a high school education earn an income below the federal poverty level, only 5% of those who have a college degree earn so little.
- Two-thirds of people with less than a high school education report having one or more chronic conditions, compared to one-third of those who have a college degree or more.

Key Indicator – How are we doing?

% of Chittenden County Residents who have less than a high school education
Source: US Census

# of adult education programs offered in Chittenden County
Source: Vermont Adult Learning

Other/Supporting Indicators