

The
EDINBURG
CENTER



Project: Saving & Sustainability

Bentley College, December 18, 2008

Background

Founded in 1977 by Golda Edinburg, The Edinburg Center is a private non-profit organization that provides services that serve to meet the diverse needs of persons with mental illness and/or mental retardation in the Waltham and Lexington, as well as the surrounding communities of Acton, Bedford, Belmont, Boxborough, Burlington, Cambridge, Carlisle, Concord, Lincoln, Littleton, Maynard, Somerville, Stow, Watertown, Wilmington and Winchester. The Center is primarily funded by the Massachusetts Department of Mental Health, with additional funding provided by the Massachusetts Department of Mental Retardation, Medicare/Medicaid, Client Fees, and additional outside funding sources. The Center provides eight key services that include 24-hour psychiatric emergency services, mental health and mental retardation residential and respite services, intensive community support services, PACT (Program for Assertive Community Treatment), clubhouse and day treatment services, and community support and outpatient services.

Mission Statement

The Center has two key statements that describe, define, and construct its daily activities, philosophies, and experiences, named as the Agency Mission and Philosophy and Principles of Service delivery. The Agency Mission and Philosophy is currently written as follows:

The Center's mission is distinguished by our longstanding belief that all persons have the potential to learn, the capacity for change, the ability to grow and actively contribute to the community. Our mission is to provide an array of innovative services which promote and enhance the quality of life of persons with mental illness, emotional disorders, addictions and/or mental retardation. The Center maintains a specific commitment to providing services to persons whose complex and challenging needs have typically been barriers to successful community living. The core values and guiding principles which govern The Center's service delivery are:

All persons must be treated with dignity, their human, civil and legal rights protected and their diversity respected

Individuals receiving services must be provided with the opportunity to actively participate in their goal development and service plan

Services must be individualized and based on a person's unique history, experiences, strengths, needs and choices

Services and support must be provided in an environment which fosters independence and maximizes an individual's potential

Services must be provided within an integrated, coordinated and accountable system of care

Service provision must be goal-oriented, based on current research and use outcome data

Systematic review, evaluation and changes in service delivery must occur to ensure that the highest quality clinical services are provided in the most efficient and cost-effective manner

As demonstrated in its mission statement, the Center, its staff, and its clients are dedicated to supporting and building a better community, not only within the community of the mentally ill and/or mentally handicapped, but expanding into surrounding communities, including Massachusetts and the global community. In light of this

mission and philosophy, the Center, its staff and clients, has recently made the decision to lessen their negative impact on the environment and make the move to become sustainable and eco-friendly. The first step we recommend in effectively implementing this change is to alter The Center's Agency Mission and Philosophy statement to reflect this decision. As small recommended change is suggested as follows:

The Center's mission is distinguished by our longstanding belief that all persons have the potential to learn, the capacity for change, the ability to grow and actively contribute to the community. Our mission is to provide an array of innovative services which promote and enhance the quality of life of persons with mental illness, emotional disorders, addictions and/or mental retardation. The Center maintains a specific commitment to providing services to persons whose complex and challenging needs have typically been barriers to successful community living. The core values and guiding principles which govern The Center's service delivery are:

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Service provision must be goal-oriented, based on current research and use outcome data

Systematic review, evaluation and changes in service delivery must occur to ensure that the highest quality clinical services are provided in the most efficient and cost-effective manner

Services will be provided in an environmentally conscientious manner, applying sustainable methods whenever possible without undue burden to the clients and/or operations

We believe that this small change will unite management, staff, and clients under one common goal and also best demonstrate to the communities of Waltham, Lexington, and other communities The Center's recent decision to lessen its direct and indirect effects on the environment.

Client Requirements

The Center and client of Bentley's Business Sustainability Program has expressed several restrictions and limitations in implementing sustainable, eco-friendly programs. The Center is primarily restricted by available funding, both in the short and long term. The Center, aside from holding 501(c)(3) non-profit status, also recently suffered a 10% state budget cut, with the expectation of further future cuts, reflective of current difficult economic times. Therefore, The Center requires no to low-cost strategies and could greatly benefit from sustainable strategies that decrease overall cost and prove financially viable. The Center is also limited in non-cash resources, including staff and time available to implement sustainable strategies. The Center has established Green Teams, comprised of management, staff, and clients who have volunteered to donate times and effort into promoting and supporting a sustainability program, who are vitally necessary in developing a sustainability initiative. Nevertheless, The Center requires changes that are easily implemented

and maintained, along with involving minimal time and man-power. These changes also need to be clear and simple, with the ability to be applied to each of The Center's 21-locations, in both large and small capacities.

Recommended Initiatives

The Edinburg Center has significant room for improvement in implementing sustainability and eco-friendly practices in a variety of areas. We recommend that each initiative be broken down into three stages, separated on the basis cost and steps required to put each initiative into effect.

Stage One

This first stage represents changes that can be made easily and quickly, maximized sustainability in both the short and long term. Each of these recommended changes is made at no cost to The Center, excluding personal dedication and limited manpower.

Change Management

As with any change created within an organization, change management is a key step that needs to be taken in order for any initiative, with regard to the environment or otherwise, to be effectively put in place.

The Center currently has Green Teams, comprised of volunteers with various positions and at various locations in the organization, who have dedicated themselves to being representatives and enforcers of any green and/or sustainability initiative. The Green Team is first and foremost necessary in and responsible for leading visibly by example and communicating new steps being taken with The Center's sustainability program to non-Green Team members. A valuable model that the Green Teams can follow in recognizing the most effective way in promoting sustainability related to Prosci's five-step model as follows:

- **Awareness** – of why the change is needed
- **Desire** – to support and participate in the change
- **Knowledge** – of how to change
- **Ability** – to implement new skills and behaviors
- **Reinforcement** – to sustain the change

The Green Team has already demonstrated their understanding of why The Center needs to make this change and by creating and joining these teams have shown that they support and participate in this change. We, Bentley's Sustainability Team, through the plan, will help provide the tools each team member needs to know how to change. The Green Team, once provided with the tools, will have the ability to implement sustainability initiatives, as sponsored by the executive team and by support of the team dynamic as a whole. The ability to sustain the changes requires dedication to the three-step plan and remaining a visible role-model. We have reworked Prosci's model below to apply specifically to The Center's current initiative:

- **Awareness** – why is being sustainable important
- **Desire** – to be sustainable both at work and at home
- **Knowledge** – of easy changes that can be made in being sustainable
- **Ability** – to easily follow sustainable guidelines
- **Reinforcement** – to sustain the change to become sustainable

This model is intended to simply to show the organizational change and knowledge that is needed. The Green Team is also responsible for providing feedback to each other during and outside of organized meetings and to

upper management regarding The Center's progress in becoming fully-sustainable and what changes can be altered to make the transition easier on other management, staff, and clients.

The Executive Board has already provided their commitment to and support of The Center's decision to become more environmentally friendly, which is a critical first step in the right direction. However, their continued and steady support is needed throughout each of the three stages to ensure that members of every level of The Center's community feel empowered and comfortable in working with and continuing with this initiative. Support from the top – down is always vital for any organizational change to be completed successfully.

The current incentive program, the Shining Green Star, should be continued to reward members of The Center community who demonstrate superior sustainability practices. The type of recognition is important in promoting a reason for everyone to strive to be sustainable.

A newsletter and/or blast e-mail with "green tips and ideas" should be sent out every month or in another reasonable designated time frame via e-mail, reminding staff and management of the ongoing status of initiatives and other small ways that persons can be more eco-friendly and sustainable. Interesting and valuable tips can be found at <http://www.ecologue.com/>. Members of the Green Team should be responsible for developing and sending out a simple newsletter and/or blast e-mail to each member of The Center. This will not only help continue regular communication and reminders about the initiative, but can also educate people about basic ways to be green and can also be used to highlight sustainability stars more often than once a year.

The ultimate goal is for each member of The Center community to become sustainable not only in their working, educational, and service environment, but also to promote and practice beyond The Center to their personal and home lives, just as it promotes mental and physical health and wellness in the services it provides. Each of the recommended initiatives in this plan can be utilized in the household, on a smaller scale if needed.

Heating & Electricity

The Center currently spends on average \$5,272.44 on electricity in the Lexington location alone. A 5% reduction in each of these bills could contribute to \$263.62 each month on average, totaling \$3,163.45 each year, generated solely from the Lexington location. Heating and electricity should be The Center's first priority in moving towards being more eco-friendly, cutting down on usage not only to be better towards the environment, but also to help alleviate the disparities resulting from recent budget cuts.

- The Center's staff should make every attempt to turn off lights when leaving a room and/or for the day. This includes leaving lights off in bathrooms when they are not being used, hallways that are not being walked down, and offices that do not have workers in them.
- The Center should consider designating a Green Team member to double-check lights at the end of the day.
- The Center should also keep the heating temperature down to tolerable levels during the days, and turned further down to 55 degrees (or the minimal temperature called for in the tenant lease) overnight.
- The Center should also consider designating a Green Team member to turn down the heating during the winter and the air conditioning off, if possible, during the summer. A map of all light switches and thermostats could be created to help assist in the speeding up this daily process.

- Also, a rotation among Green Team and other staff members could be created in an Outlook calendar format to ensure that the burden is not placed upon one individual for an extended period of time, and that utility bills are kept at a minimum. This rotation would promote an effective team effort that would provide excellent returns for The Center overall.

Keeping heating and electricity bills down also relates directly to the amount of heating and cooling needed by persons within The Center's buildings. Heating temperatures can be kept at a minimum if each person dedicates themselves to wearing an additional layer of clothing, particularly during the coldest winter months. Wool is the most healthy material clothing can be made out of in a cold environment, as it is a bad conductor of heat, and therefore unable to escape and keeping the heat closest to the body. The second best option during the winter is flannel. Less frequent running of air conditioning during the summer months can help keep electricity costs down. Wearing less clothing and perhaps relaxing clothing conduct policies, within reason (i.e. casual work-wear summers), can keep body temperature down and require less cooling. Linen and cotton are fabrics that endorse better flow of air, and reflect the sun's rays in lighter colors such as white, light pink or light blue.

Controlling window coverage can also contribute significantly positive temperature modifications in The Center's buildings, particularly on sunny days. During the winter, blinds can be kept raised and open around well-sealed buildings to aid in solar warmth drawn from the sun's rays. During the summer, the blinds can be kept closed and drawn in order to keep in cool air and avoid absorbing heat from solar rays. Passages doors should also be kept shut on both ends whenever possible, to inhibit the circulation of warm and of cold air.

Energy Audits

NSTAR and National Grid US both provide free energy audits, at no cost to The Center. Both utility companies can identify energy saving opportunities. NSTAR will pay up to 70% of total cost of replacing fixtures, such as light bulbs (see recommended initiative in Stage Three). Each audit can be set up by contacting NSTAR at 781-441-8592 or c.and.i.energy.ency@nstar.com and filling out a registration form for National Grid at https://www.nationalgridus.com/masselectric/business/forms/4_small_form.asp. Both companies also offer energy calculators on their websites, showing savings that can be realized within a determined parameter, such as a 3% decrease in electricity usage.

Paper Printing & Usage

The first and most effective alteration that can be made in cutting down paper usage is to utilize double-sided printing at all times, except under special circumstances.

The Center can also print on recycled paper, usually at the same cost of non-recyclable paper. If The Center's current supplier cannot offer recycled paper at the same cost, then consideration should be made in changing to Staples, who offers recycled paper at the same, often lower, cost.

Flip charts (Item 428893, \$15.99 at Staples) and dry erase boards (518902, \$25.19 at Staples) can be purchased at a minimal cost and be used as pre-written replacements for agendas and placed in view for attendees of meetings of all sizes.

Reducing paper usage will contribute to cutting down overall trash disposed of by The Center. The Center incurs a significant amount of cost from dumpster usage and maintenance and downsizing dumpster size would bring in returns for The Center. Persons could individually cut down on overall trash by returning home and personally disposing of garbage brought to work, such as non-recyclable containers and wrappers from lunch items. The Center should continue with its current paper recycling program and each person should make every effort to recycle every piece of paper possible.

Office supply costs and paper usage could be cut down by using online programs for reminders and notes, instead of paper. Post-It notes can be replaced by a free, easy-to-use, online program, Post-It Software Notes Lite found at: http://www.download.com/Post-it-Software-Notes-Lite/3000-2351_4-10060027.html

Kitchen

The kitchens in The Center are a prime area that could benefit from cost reduction as the result of sustainability practices. Each appliance, aside from the freezers and refrigerators, should be shut off and unplugged when not being used. Small wires from oven clocks can be disconnected to ease power usage if clocks are not needed. Microwaves and toaster ovens should be used to heat individual meals, instead of using a stove top or full oven to conserve electricity.

Each freezer and refrigerator can be cleaned and reorganized to provide maximum cooling and energy usage. Steps include cleaning the coils on a regular basis and labeling containers and bins so that food is not used or spoiled and taking up valuable space. Freezers can be organized by temperatures needed to effectively maintain certain frozen food and shelving options can allow for more space and air circulation. Valuable step by step tips can be found at: <http://www.riverwired.com/blog/top-7-tips-green-your-refrigerator>

A space can be set aside for personal ceramic coffee cups to be used, instead of Styrofoam and/or paper cups. The Center would not have to incur the cost in purchasing disposable cups, therefore encouraging their use and cutting down on waste.

Personal Greening

Although The Center is making a great move in becoming a sustainable workplace, this initiative can only be successful if staff, management, and clients value the philosophy of eco-friendliness and sustainability enough to bring it into their own homes. This includes participation in residential recycling programs, cutting down on home paper usage, and turning out the lights when a room is not occupied or no one is at home.

Sustainability can also be no-cost at home, with benefits showing in decreased heating and electricity bills.

There are several videos that can be watched at home or at work that show great ways on being sustainable at home, for those living with families or alone. These include:

http://www.nickjr.com/parenting/flicks_for_kids/ffk-sesame-street-love-the-earth.jhtml and <http://www.blinkx.com/video/cheap-easy-ways-to-go-green/OFv2HJMYuU1996qScSYGrQ>

Stage Two

This stage represents changes recommended by the Bentley Sustainability Plan that can be made a no to low-cost to the Center. However, although these changes may cost in the short-term, each reaps long-term benefits and cost returns to The Center.

Kitchen

While very necessary as part of the services The Center provides, the kitchens clearly are a huge cost to The Center, both in supplies and energy usage. It is clear that there is an immediate need to replace a dishwasher in the downstairs kitchen area. We recommend that this be replaced with an Energy Star but high-volume dishwasher in order to cut down on water usage required by hand-washing of dishes that cannot fit and energy used by running smaller capacity washers multiple times. Although the high-volume washer uses a significant amount of electricity and water, the kitchen has a huge volume of dishes that need to be washed, and a smaller dish washer would be run more often, using more water and electricity per dish than if a larger, higher volume washer was purchased.

Replace current paper towels with recycled paper towels at a lower cost or highly absorbent cloth towels (16 Shamwow towels for \$19.95 at local stores) that can be rinsed and dry easily. Although a greater up-front cost, if maintained properly, using reusable towels over time would be much more cost-effective.

Replace Styrofoam meal containers with eco-friendly containers (http://www.greenlinepaper.com/kitchen/restaurant/containers/cat_41.html) or recycled paper containers now used by high-volume retailers (<http://www.biosmartbiodegradable.com/BiodegradableFoodserviceSupplies/BioPlus4TakeOutBox-8x6>). Many of these products can be found at wholesale dealers such as BJ's and Costco, as well as low-cost restaurant supply stores such as BMS Paper Supply in Jamaica Plain.

Replace 100-calorie snack packs with 100-calorie options. The packaging for these snacks is wasteful and sold at a higher unit cost than snacks packaged in larger containers. More eco-friendly options include:

- Half an apple with 2 teaspoons of peanut butter
- 4 mini rice cakes with 15 dry roasted peanuts
- 3 handfuls of lightly buttered popcorn
- 2 large graham crackers and 1 teaspoon of peanut butter
- 1 medium-sized chocolate chip cookie
- ¼ cup of dried fruit with 1 reduced-fat string cheese stick
- ¼ cup of reduced fat ranch dressing with a handful of raw veggies

Each of these snacks could easily be distributed with a scoop onto recycled paper towels and/or prepackaged in recycled containers such as paper bags ahead of time. Each of these snacks is more filling than what is provided in the 100-calorie packs and is more cost-effective.

Grants

One of the primary areas where The Center is being held back in becoming effective and sustainable is in its out-of-date Windows software platform. Microsoft offers free software through its partner, TechSoup Stock, an online product donation service that connects nonprofits with technology product donations from more than twenty-five leading corporate and nonprofit technology partners. TechSoup Stock charges only an administrative fee to cover overhead costs. For example, Tech Soup offers Microsoft Office 2007 Professional Plus at a cost of \$20 versus \$499 to eligible non-profits and public libraries. TechSoup requires an organization to fulfill the following requirements to receive technology product donations:

In order to be qualified to receive any donated products, organizations must be able to demonstrate their status as 501(c)(3) nonprofit organizations, registered Canadian charities, or U.S. or Canadian public libraries. In most cases, qualification entails providing documents by fax, mail, or email. TechSoup Stock customer service representatives use these documents to verify registration information. In addition to TechSoup Stock's eligibility requirements, each of TechSoup Stock's technology partners has its own restrictions for donations based on such factors as type of organization, annual budget, and the number of other products an organization has received in the past. These partner restrictions are based on the philanthropic policies of the partners and are not reflective of TechSoup Stock policy. Each partner has different eligibility requirements for donations.

We believe that The Center more than fulfills these requirements and should apply to TechSoup Stock for software donations that will replace its out-of-date platforms and provide the staff with the tools needed to effectively become sustainable by communicating electronically whenever possible and in a simpler, more creative way.

Application and registration instructions along with a full list of software products available can be found at <http://www.techsoup.org/stock/gettingstarted/default.asp#eligibility> and <http://www.techsoup.org/stock/default.asp>. More information about Microsoft's specific partnership and eligibility requirements can be found at <http://www.microsoft.com/About/CorporateCitizenship/US/CommunityInvestment/Eligibility.msp#SoftwareDonations>

Incentive Programs

Persons within organizations typically only continue to successfully follow through programs when rewarded and provided incentives for their hard work. While the Green Shining Star program provide excellent recognition to persons who work hard to be sustainable, an additional incentive to promote competition within The Center would be most effective in fulfilling this sustainability initiative. One suggestion is a raffle held every six months to once a year. Staff, management, and clients in The Center can receive tickets for performing a sustainable act, such as turning off a light in a bathroom or considerably cutting down on paper usage and waste. This can even extend to personal choices, such as bicycling to work or taking public transportation. Tickets can be awarded by nomination by other staff, management, and/or clients, with guidelines set at the discretion of The Center. More tickets awarded results in a greater chance of winning. A Green Team member can be responsible for keeping track of nominations, entering them into an Excel document and eventually generating a list to select from randomly. Awards can vary, but our suggestion is a personal or vacation day for staff and management members if possible and a gift or free service for a client.

The Center can also reach out to local vendors and collect donated items to create a gift basket to be given to the winner.

Organized Carpool Program

The Center should work to create an in-house carpooling matching program, where individuals who live in the same neighborhoods travel to work together. This can help everyone save money on fuel by splitting the cost of gas while reducing carbon emissions. Sign up for the carpool program as well as a list of locations where people live can be displayed on a designated bulletin board or flip chart in a common area. An example carpooling program can be found at <http://www.path-nh.org/Rideshare.html>. As an incentive for carpooling, we recommend that parking spaces be reserved by a simple staked sign close to The Center for carpoolers.

Stage Three

This stage is the final stage in Bentley's recommended Sustainability Plan. This stage is clearly the most costly and expected to be completed in the future, depending on additional received funding and overall savings from sustainability practices in Stages One and Two. However, each of the steps in Stage Three provide long-term savings and equate to the highest return in benefiting the environment.

Kitchen

The kitchens are currently stocked with older appliances that are not energy efficient or sustainable. The Center should keep in mind when replacing broken appliances such as stoves and dishwashers, Energy Star appliances are more efficient and can be purchased at a discounted rate from wholesale suppliers. The Northeast ENERGY STAR Products Initiative can provide information for local suppliers that provide Energy Star appliances being sold at a low rate due to color, style, and/or brand. Further information about this service can be found at http://www.energystar.gov/index.cfm?c=pt_awards.2008_northeast.

The Center can become sustainable in replacing food containers with reusable containers, such as storage containers, plates, flatware, and glasses wherever is more efficient overall than reusable containers, with respect to the amount of water used to wash such containers. Although an expensive undertaking, this is a one-time up-front cost that can prove to be very cost effective in consideration of the volume that the kitchens produce in serving meals. 16-piece dinnerware sets can be purchased at Target (\$9.99 each set) as well as in large amounts from discount kitchen suppliers such as BMS Kitchen Supply in Jamaica Plain or wholesale sellers such as BJs, Costco, or Wal-Mart. In consideration of these purchases, The Center should examine quality with relation to cost and purchase materials such as Corelle dinnerware that is proven to be resistant to breakage. The Center can also look into highly-quality recyclable, polycarbonate plastic dinnerware, double-checking to ensure that it is dishwasher and microwave safe. Examples of various serving and dinnerware sets can be found at <http://www.kidsmartliving.com/> in different styles, colors, and costs.

The Center should consider making the move to purchase organic food items packaging in recyclable, eco-friendly containers. Moving to organic eating does not always equate to higher cost, but can represent higher quality and superior taste. Many multiple large suppliers currently carry lines of organic food brands, including Kraft (www.kraftfoods.com) and Nabisco (www.nabiscoworld.com). These foods can be purchased at Costco

and BJs. The Center should also make a move to serve Fair Trade coffee, provided at an equal cost by a local supplier, Green Mountain Coffee Roasters (<http://www.greenmountaincoffee.com/shop/OurCoffees/FairTradeOrganic>).

Fixtures

The Center can also replace all light bulbs with Compact Fluorescent light bulbs. Although purchased at greater cost, they draw 75% less energy and last 10 times longer than regular incandescent light bulbs. This replacement strategy can be implemented gradually or all at once and bulbs can be purchased from wholesale suppliers. Northeast ENERGY STAR Products Initiative can also be contacted for coupons and discounts. More information on the value of compact fluorescents can be found at http://www.energystar.gov/index.cfm?c=cfls.pr_cfls.

The Center should consider replacing all faucets with low-flow aerators to cut down on water usage. Low-flow aerator faucets mix air into the water stream, maintaining steady pressure so the flow has an even stream. These faucets costs between \$5-\$10 and can reduce water usage by up to 60%, also decreasing energy usage as they require less gas to heat hot water. We recommend faucets first be replaced in the kitchens, followed by bathrooms and other locations. These are easily installed, as shown by in a do-it-yourself video found at <http://www.dannylipford.com/diy-home-improvement/kitchens-and-baths/low-flow-faucet-aerator/>.

The Center should also purchase and replace multiple plug-ins with surge protectors wherever possible. These not only decrease idle unnecessary energy flow, but also can ensure that appliances and electronics are shut off with one click. Surge protectors with save The Center an average of 5% each month on its energy bill. Energy Star surge protectors can be purchased in bulk from wholesale warehouses for around \$15-\$19 for a four-pack.

The Center should work to replace all of their existing computer desktops with laptops. Laptops utilize 90% less energy than their desktop counterparts. Microsoft provides free and discounted computer electronics through their Community Microsoft Authorized Refurbisher (Community MAR) Worldwide program found at <http://www.mar.partners.extranet.microsoft.com/>. Microsoft values environmental sustainability as part of its Corporate Citizenship Program, and along with TechSoup, helps non-profits replace out of date, energy inefficient computers. The Center can apply for refurbished laptops in conjunction with applying to TechSoup, with just additional petition information required to replace electronics.

Conclusion

We hope that The Edinburg Center finds all of these initiatives feasible within its budget and stated requirements. We thank The Edinburg Center for the opportunity to share with it and its community simple ways to be environmentally sustainable and friendly. We know that its dedication and commitment to this initiative will be positively reflected in the community and congratulate The Center for leading by example in Waltham, Lexington, and the other communities within which is has a presence.

If anyone at The Center ever has any questions about sustainable in any manner or form, please free feel to contact the Bentley Sustainability Team for this project at hill_ashl@bentley.edu.

Thank you again for the opportunity!

Sincerely,

A handwritten signature in black ink, appearing to read "Ashli Hill", enclosed in a thin black rectangular border. The signature is written in a cursive style with a long horizontal stroke extending to the right.