

3. SUSTAINABILITY PLAN ELEMENT

3.1 BACKGROUND

3.1.1 Objectives and Importance

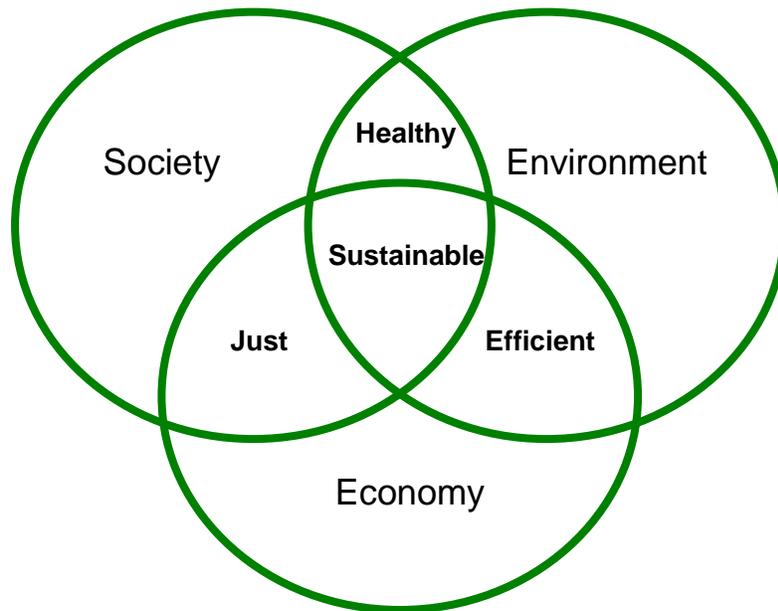
Many sustainability elements in other less developed communities focus on future land use patterns and development models as well as on behavior and policy. In contrast, Haworth is a fully developed community. Its focus, therefore, should be on behavior, policy, awareness, practices, retrofitting, and interconnectivity.

According to N.J.S.A. 40:55D-28b(16), a Green Buildings and Environmental Sustainability Plan Element: "...shall provide for, encourage, and promote the efficient use of natural resources; consider the impact of buildings on the local, regional and global environment; allow ecosystems to function naturally; conserve and reuse water; treat storm water on site; and optimize climatic conditions through site orientation and design."

The terms "green" and "sustainable" have become commonplace in today's environmental vocabulary. They have become as recognizable as the terms "environmental", "natural" and "ecosystem". For this reason it is important to define these two terms that are new and contemporary in most circles but which have been used for decades by certain environmentally minded professionals:

"Green design" is an overview term indicating a direction of improvement in design. For example, this could mean continuous improvement towards a complete and healthy integration of human activities with natural systems.

"Sustainability" is the capability to equitably meet today's human needs that are vital to our existence without compromising the ability of future generations to meet their own vital needs. This is accomplished by preserving and protecting the area's ecosystems and natural resources, integrating them into our human needs and utilizing them responsibly. The concept of sustainability describes conditions wherein human use of the natural resources that are required for the continuation and sustenance of our lives is in balance with nature's ability to replenish these resources. The following diagram illustrates the described integration principle and how it pertains to a community, in this case, Haworth.



In preparing a Sustainability Master Plan Element, it is important to establish a common vision and set of goals for the community.* In Haworth, these are set forth as follows:

Vision of a Future Sustainable Haworth:

As an economically, socially and environmentally sustainable community, Haworth will continue to have sustainable land uses, efficient circulation, a protected environment and abundance of open space, an engaged and responsible population, an equitable community, and a government that is a leader in sustainability. Haworth will continue to encourage green buildings and expanded recycling and reuse of materials. A brief explanation of what is envisioned in each of these goals is provided below.†

Sustainable Land Uses - The location of future land uses, including infill redevelopment land uses, will be planned with primary considerations being environmental sensitivity, economic opportunity, land use compatibility, ease of connectivity, and access to transportation routes, and will be mindful of those who live and work in Haworth.

* The Municipal Land Use Law [MLUL] lists 15 purposes [Section 40:55D-2 Purpose of the Act] that preceded the advent of Sustainability Master Plan Elements. Thirteen of these are consistent with sustainability objectives in general and this Plan specifically. These are presented and discussed in **Sustainable Haworth 2012**.

† A comprehensive analysis of Sustainability as it pertains to Haworth was conducted by the Haworth Sustainability Project Team, supported in part by a grant from ANJEC. The complete report, **Sustainable Haworth 2012**, is available and should be considered a reference document for this Plan.

Efficient Circulation – Haworth does not presently have multi-modal mass transportation access. Residents depend on only a few buses and their private vehicles. Since increasing access to more mass transit is unrealistic at this time, it will be the intra-Haworth transportation system and interconnectivity to Haworth’s neighboring communities that will become more comprehensive. The routes for bicycles, pedestrians, automobiles and scooters will be interconnected and continuous. In this manner, the disjointed nature of the piecemeal facilities will be eliminated in favor of opportunities to traverse town and arrive at a variety of desirable destinations. Some of these destinations will include the Chestnut Bend bus station, the government complex, the shopping district, the schools, the houses of worship, and the parks. This will encourage the use of non-motorized (and low-motorized in the case of scooters) means of transportation that will serve to reduce emissions, improve the health and well-being of residents and visitors, and decrease congestion.

Protected Environment and Abundant Open Space – As has always been the Borough’s policy, all parks and open spaces (both public and private) will be protected. The Borough will continue its policy of not disposing of publicly held open spaces, except in cases where small slivers of land are more appropriately owned by their neighbors. In the future, Haworth will do a more thorough job of protecting street trees and trees on all public properties within the Borough.

Engaged and Responsible Population -- From individual actions, behavior, and community-minded awareness in their everyday activities to group projects such as maintaining the community tree nursery and community cleanups, Haworth’s residents will be encouraged and supported in efforts to join together to help the Borough become a sustainable community. In the future, Haworth will strive for greater levels of community participation and commitment to promoting and achieving the Borough’s sustainability efforts.

Equitable Community – An equitable community is one that offers opportunities for all residents, irrespective of age, gender, religion, race or ethnicity. As an equitable community, Haworth has and will continue to provide affordable housing, access to employment, access to public transportation, and valued community services for all Borough residents.

Government Leadership - Haworth’s government will lead by example by undertaking efforts such as reducing the waste stream generated by the municipality, reducing the Borough’s energy use, working with surrounding municipalities to explore ways of combining services, and by exploring the use of green building techniques in future public buildings and expansions. These actions would lower operating expenses and set examples for Borough residents, business owners, and other area municipalities.

Green Buildings and Energy Efficient Site Design – Haworth will encourage buildings to be constructed and maintained by using a variety of green technologies and techniques, including properly locating buildings to maximize passive solar orientation and winter storm buffering, and by influencing the construction materials utilized by encouraging the use of recycled and energy efficient materials.

3.1.2 Haworth's Sustainability History

The value of documenting the Borough's recent sustainability history and accomplishments is to establish a baseline against which additional progress can be measured. Sustainable measures of importance have been implemented within Haworth. The Proposed Sustainability Element of the Master Plan will, for the first time, provide an overall plan and direction for these efforts. A few of the organizations that have adopted these measures include the Governing Body, the Planning Board, the Environmental Commission, and the Department of Public Works. Over the past several years:

The Governing Body has:

- Entered into agreements to purchase its energy in bulk at reduced cost;
- Had a municipal energy audit performed so that a plan for efficiency improvements can be prepared;
- Upgraded the energy efficiency of street lighting and of municipal buildings – and encouraged the upgrading of the energy efficiency of the Haworth School;
- Approved solar panels for strategically located street lighting poles;
- Initiated a municipal tree farm, arranging for the site, materials, and volunteers to oversee and operate it;
- Initiated recreational programs specifically targeted to promote healthy lifestyles for children;
- Created the inaugural 5K Run to promote healthy lifestyles for both adults and children;
- Erected “No Idling” Signs at the Haworth School;
- Promoted food drives at the Post Office and Borough churches, to help promote an equitable community where no one needs to go hungry;
- Adopted a policy of no disposition of publicly owned open space;
- Begun an annual Health Fair for residents and guests;
- Supported and promoted blood drives to support the regional blood bank;
- Promoted scouting for boys and girls as a way of promoting environmental stewardship and knowledge of outdoor living skills;
- Enacted an ordinance governing the recycling and disposal of construction and demolition debris, and;
- Supported the philosophy of creating a walkable community.

The Governing Body has continued to examine other actions that might enhance sustainability; these are explored more fully in **Sustainable Haworth 2012**.

The Planning Board has:

- Recognized and protected critical environmental areas [CEAs] in both the Master Plan and the Zoning Ordinance;
- Adopted the Borough's first Conservation Plan Element of the Master Plan;

- Adopted a new Land Use Plan Element of the Master Plan that places strong emphasis on environmental protection;
- Created a new residential building zone that reflects the prevailing dimensional and environmental conditions of the Borough and projects those features by diminishing the potential for higher density redevelopment;
- Participated in two cross-acceptance processes of the NJ State Planning Commission's State Development and Redevelopment Plan. Working with the Bergen County Department of Planning and Economic Development, Haworth's Planning Board mapped the entire borough in compliance with SDRP standards. In doing so, they documented most of the Borough as being Environmentally Sensitive Planning Areas, while other were identified as Critical Environmental Sites;
- Adopted a Housing Element and Fair Share Plan that, once implemented, would provide more equitable housing by expanding alternative opportunities within the Borough;
- Redesignated and/or rezoned lands which are encumbered by an abundance of natural resources to watershed and environmentally sensitive lands from their previous inappropriate designations as residential and business properties; and
- Created ordinances requiring a three pronged approach for evaluating environmental impacts that could be anticipated from development proposals as part of the development approval process. The process begins with an environmental checklist, followed by an environmental assessment if required, and concludes with an environmental impact statement for the most serious of cases.

The Environmental Commission has:

- Prepared an Environmental Resource Inventory [ERI];
- Regularly updated the ERI large-scale map exhibits on display in the Council Chambers;
- Organized the annual Town clean-up day;
- Obtained two Smart Growth grants for environmental initiatives;
- Conducted environmental education programs for residents and students, and;
- Mapped NJDEP c-1 anti-degradation category lands.

The Department of Public Works [DPW] has:

- Conducted recycling education sessions for Haworth School students in grades K-3;
- Installed timers on Borough lights, pond fountains, and HVAC units;
- Installed recycling containers within the Borough parks;
- Implemented a "No Idling" policy for any stops other than those of extremely short duration;
- Disseminated information on the value of recyclable materials to residents through their tax bills;
- Made concerted efforts to reuse materials that might otherwise reach the waste stream, and;
- Created a brine snow removal system at no cost to Borough residents.

3.2 PROPOSED SUSTAINABILITY PLAN

As stated above, the vision of the Borough of Haworth is to achieve an economically, socially and environmentally sustainable community. To do so, the Sustainability Plan Element recommends that the Borough pursue a strategy with four major components; these are:

- **Legislation** – in the sections that follow, the Plan provides specific recommendations for changes in existing ordinances or the creation of new ordinances where appropriate to establish the legal and regulatory infrastructure needed to support the commitment to sustainability;
- **Integration** – as noted, earlier, existing ordinances and the Master Plan already contain many important provisions and policies in support of sustainability. It is essential, however, that these disparate pieces be gathered together and seen as part of a comprehensive, coordinated approach. The Plan references these separate pieces and provides guidance for their integration into a coherent whole;
- **Implementation** – the translation of the theories, concepts, and policies into concrete results will require continuous effort on the part of the Governing Body, operating through its administrative departments and voluntary commissions and committees, to maintain focus on sustainable objectives; the Plan identifies specific opportunities for administrative action in support of these objectives;
- **Education** –most importantly, the achievement of a sustainable community will be dependent not on law and regulation, but on the involvement and commitment of all members of the community to follow sustainable principles in all aspects of their lives and activities. The Plan identifies numerous means for advertising, educating, and communicating with all members of the community to secure their voluntary commitment to practice sustainability.

3.2.1 Community Awareness, Education and Publicity

As noted above, an informed and motivated community is the key to the adoption and utilization of sustainable “Green” principles and practices in the culture and fabric of daily life. The Plan recommends that the Governing Body designate the Environmental Commission or a newly-created “Green Team” as the lead entity in promoting community awareness and education and publicizing “green” events and achievements. The Plan further recommends that this designated entity take full advantage of all available communications channels, including social media, the Borough Newsletter and website, bulletin boards, and publications to “spread the word”.

Specifically, the Plan recommends that **Sustainable Haworth 2012**, the report of the Haworth Sustainability Project Team, be converted into a user-friendly Handbook that could be made widely available to all residents and organizations in the community through both electronic and print media as a guide for adopting appropriate behaviors and actions. Other effective means for advancing awareness and education could include, but not be limited to, the following:*

* Additional information on these items can be found in **Sustainable Haworth 2012**, at Sustainable Jersey [www.sustainablejersey.com], and from the Association of New Jersey Environmental Commissions [ANJEC; www.anjec.org].

- Adding a “green page” to the Borough’s website announcing the Borough’s green and sustainable initiatives;
- Adding a periodically changing “green message” to all government emails, informing residents of small steps they can take to contribute to the community effort;
- Creating sustainability educational exhibits for display at Green Fairs and at the Borough Farmers Market identifying specific steps residents can reasonably take in their homes and businesses;
- Recognizing the achievements of sustainable and green businesses by citing them in the Borough Newsletter and with celebratory window stickers;
- Engaging and educating the public on the effect of behaviors and consumption patterns on the environment, acknowledging that the consumption of natural resources must be done responsibly and without depleting them to the point where they cannot adequately replenish themselves;
- Encouraging and assisting the Boards of Education [Haworth, Northern Valley Regional] to integrate environmental education into the curricula, with emphasis on local documents such as Environmental Resource Inventories, Conservation Elements, and Sustainability Elements;
- Inviting the Schools to take field trips into the local natural areas; providing volunteers to speak with students about the environment and its value; and encouraging the establishment and continuation of student Environmental Clubs and the involvement of students in local sustainability efforts.

3.2.2 Climate Change/Green House Gas Emissions

While there is still debate over the potentially negative impacts of climate change and greenhouse gas emissions, prudence suggests that there is sufficient evidence to support energy conservation measures for both environmental and economic reasons. The Plan recommends a three-pronged effort to assess the potential for energy conservation;

3.2.2.1 Energy Conservation Measures in Public Buildings and Rights-of Way

Energy audits of all public buildings and rights-of-way should be conducted to identify sources of presently inefficient or wasteful uses of energy and to identify potential measures, in both utilization and equipment, for reducing future energy utilization and costs. Possible outcomes of this audit might include:

- The development of a plan, budget, and timetable for implementing the recommendations contained in the audit;
- Recommendations as to more energy- and cost-efficient lighting;
- Recommendations as to the possible expanded use of solar panels to power street lights, electronic signs, etc.

- Recommendations as to turning off vehicular [gas- and diesel-powered] engines when standing. Idling of such vehicles is inefficient and a known source of air pollution. Therefore, vehicles subject to frequent stops [police, mail, public works, utilities, etc.] should shut off engines when stopped.

3.2.2.2 Energy Conservation by Residents

The Plan recommends that the Governing Body establish, in concert with the utility companies that service the Borough, a comprehensive, economical program for conducting, on a voluntary basis, a uniform energy audit of all private homes and for implementing the recommendations of such audits. Possible components of such an audit would include, but not be limited to, such considerations as follows:*

- Insulation;
- Caulking and/or re-caulking joints and windows;
- Storm doors and windows;
- HVAC;
- Electrical systems and circuitry;
- Appliances and other electronics;
- Landscaping and tree plantings/placements;
- Indoor and outdoor lighting;
- Fireplace doors, pool covers, etc.

3.2.2.3 Energy Conservation by Businesses

The Plan recommends that the Governing Body establish, in concert with the utility companies that service the Borough, a comprehensive, economical program for conducting, on a voluntary basis, a uniform energy audit of all businesses and for implementing the recommendations of such audits. Possible components of such an audit would include, but not be limited to, such considerations as follows:†

- Landlord/tenant cooperation and responsibilities;
- Indoor and outdoor lighting, including signage and use of motion detectors;
- Storm doors and windows;
- Anti-idling and delivery vehicles.

3.2.3 Renewable Energy

The intent of the Plan is to promote the use of renewable energy sources; specific recommendations for the different sectors of that community would include, but not be limited to, the following:

* For a complete discussion of these and other potential energy-conservation measures, see **Sustainable Haworth 2012**.

† For a complete discussion of these and other potential energy-conservation measures, see **Sustainable Haworth 2012**.

3.2.3.1 Solar Energy Systems in Homes

- Consider installing new or used solar energy systems and panels;
- Place installations on roof tops with the proper orientation (south to west) and access to direct sunlight only;
- Do not screen these systems from access to the sun from the east, south, or west.

3.2.3.2 Renewable Energy Systems in Businesses

- Consider the installation of solar panels on business roofs, particularly on large surfaced flat roofs;*
- Examine the potential of wind power in cases where it would not adversely impact residential properties. For example, the United Water Resources property along Lake Shore Drive would be a prime candidate for such systems for two reasons: first, the open water reservoir provides exposure to higher wind velocities than is available elsewhere in the Borough, and; second, there are no residences within close proximity that could be considered sensitive receptors to noise;
- All businesses that generate renewable energy should seek arrangements to sell the excess energy generated back to the appropriate power company.

3.2.3.3 Renewable Energy Systems in Public Buildings

- The Governing Body should investigate the potential benefits of installing solar panels on the roofs of the Borough complex, including Borough Hall/Police Station and the existing and future expanded library building. The Haworth School System should be encouraged to consider a similar investigation;
- Houses of worship should also be encouraged to consider roof top solar energy system installations as such facilities may generate more solar energy than is consumed, thus allowing for the excess to be sold back to the appropriate power company.†

3.2.4 Green Building & Design

The intent of the Plan is to encourage and support the incorporation of green techniques and features into building design and site plans. The Plan recommends that the Planning Board add green design considerations to the Borough's site plan and subdivision checklists in the key areas of Water Conservation, Tree Preservation, and Avoiding Disturbance of Natural Resources. These design considerations should reflect current 'Best Practices' as outlined in **Sustainable Haworth 2012** and other sustainability resources outlined in that report and would provide guidance to the appropriate reviewing agents and applicants. These design considerations would include, but not be limited to, the following:

* See **Sustainable Haworth 2012** for a discussion of the possible uses of incentives and abatements in encouraging businesses to convert to renewable energy sources.

† See **Sustainable Haworth 2012** for reference to GreenFaith, an organization that is promoting this approach for houses of worship.

3.2.4.1 Water Conservation

- Encouraging turning off water taps and faucets when engaged in activities that use water only intermittently, such as washing cars or dishes;
- Using low-flow faucets, showerheads, and toilets;
- Permitting the construction of green roofs [plantings] on building to absorb storm water and reduce runoff, absorb carbon dioxide and exude oxygen, provide additional insulation to support cooling and serve as a barrier to heat loss, and create additional outdoor living space;
- Encouraging the installation of rain barrels on leader drains from gutter systems to capture rainwater for watering gardens and lawns and other secondary uses;
- Encouraging the use of French drains, reverse French drains^{*}, rain gardens[†], and similar approaches to drainage design where appropriate to capture and disperse rainwater and runoff effectively to support lawns and plantings;
- Encouraging xeriscaping, or dry landscaping, a type of planting that utilizes water-conserving techniques such as the use of drought-tolerant plants, water-absorbing mulch, and natural irrigation.

3.2.4.2 Tree Preservation

- Discouraging indiscriminant tree cutting by strengthening policies and practices that protect trees within the public right-of-way and on public property [See Ordinance #947.16 Protection of Trees on Streets, Roadways, Rights-of-Way, Parks, Recreation Areas, and Other Public Property];
- Creating a Tree Preservation & Removal Ordinance; the Plan recommends that the Planning Board undertake the development of such an ordinance that would:
 - Emphasize and support the preservation and protection of existing mature and healthy trees;
 - Allow for appropriate replacement plantings [see below on Native Planting] when existing trees are removed;
 - Preserve the property rights of landowners while providing clear guidance and support as to the management of trees on private property;
- Encouraging the use of species that are native or naturalized to the Region, that are less likely to require the use of chemicals to thrive and are generally in balance with the local ecology, using replenishable nutrients and moisture in a sustainable manner;[‡]

^{*} Reverse French drains are used to capture roof water conveyed via leader drains and deliver it directly to plant root systems; for a fuller discussion, see **Sustainable Haworth 2012**.

[†] Rain gardens are earthen depressions planted with absorptive native plant materials; rain gardens mimic the natural absorption and pollutant removal abilities of a forest, meadow, or prairie. By directing rainwater from the roof, driveway, sidewalks, or streets into a rain garden, it is allowed to slowly soak into the ground, filtering out contaminants, and cleaning the water. Rain gardens can absorb runoff as much as 30-40% more efficiently than conventional lawns. For more information, see **Sustainable Haworth 2012** and resources referenced in the Report.

[‡] See **Sustainable Haworth 2012** for a discussion of native plantings.

- Utilizing the 2009 Haworth Shade Tree Inventory* as a reference and guide for locating new plantings and for increasing and balancing the biodiversity of species;
- Taking account of the proximity of street trees to utility lines when planting new trees;
- Using the Borough Tree Nursery as a source of native trees.

3.2.4.3 Avoiding Disturbance of Natural Resources

- The Plan affirms the intent and application of Haworth Land Use Ordinance 26-904.2 that requires minimizing the disturbance of natural features and excessive tree cuttings in site development:
 - Encouraging redevelopment over new development whenever possible;
 - Discouraging clear cutting of undisturbed lots for development;
 - Minimizing site disturbance in site plan creations;
 - Applying existing Environmental Assessment Regulations to explore reasonable alternatives that would minimize disturbance;
- Enforcing the existing Borough ordinance regulating the collection of firewood from Borough woodlands and open spaces; in addition, the Plan recommends considering expanding the ordinance to:
 - Prohibit the cutting of live wood and other plants within the Borough's open spaces;
 - Discourage the deposition of any foreign materials, including grass clippings, in the Borough's open spaces;
 - Limit the collection of firewood from woodlands to branches and small logs, leaving larger fallen trees to decompose naturally;
- Considering banning all-terrain vehicles and dirt bikes in natural areas.

3.2.4.4 Proper use and maintenance of ornamental plantings[†]

- Utilizing established Best Practices in selecting, installing, and maintaining ornamental [non-native] plantings, including:
 - Educating residents and landscapers on the need for and methods to decrease use of herbicides, pesticides, and fertilizers and on the desirability of using organic fertilizers;
 - Managing the intrusive spread of certain ornamental plants;
- Encouraging the use of Integrated Pest Management (IPM) methods for pest control for ornamental plantings;[‡]

* R. Holden, Haworth Shade Tree Inventory [Eagle Scout Project], Summer 2009

[†] See **Sustainable Haworth 2012** for a fuller discussion of the role and use of ornamental plantings.

[‡] IPM is an environmentally sensitive approach to pest management uses extant knowledge of the life cycles of pests and how they interact with the environment, along with conventional pest management methods, to minimize pest damage while minimizing hazards to people, property, and the environment [Further information can be obtained from NJDEP and ANJEC].

- Encouraging the voluntary employment of Best Management Practices [BMPs] on White Beeches Golf and Country Club to the same extent they are required on the Haworth Golf Club.*

3.2.5 Land Use & Mobility

The intent of the Plan is to provide for safe, flexible movement by multiple means throughout the Borough and to do so in a manner that is environmentally sensitive and convenient and responsive to the needs of residents. Specific recommendations would include, but not be limited to, the following:

3.2.5.1 Safe Routes to School

- Making walking, bicycling, and driving to school safer and more convenient by examining the installation of traffic calming devices, such as speed humps, speed tables, informative signage, curb extensions, and visually apparent crosswalks along the primary routes to schools;
- Identifying more distant locations on common lines towards schools that would benefit from traffic calming.

3.2.5.2 Non-motorized Transportation Routes

- Improving pedestrian and bicycle accesses to the buses that utilize the Chestnut Bend station by installing continuous sidewalks and creating marked bicycle routes;
- Providing an off-street parking facility at Chestnut Bend;
- Completing interconnected bicycle routes in a planned fashion within and throughout town, both on and off road, including designated paths, separate lanes, and 'share the road' and route signs; these routes should be connected to those from adjoining communities wherever possible;
- Completing existing sidewalks and off-street pedestrian routes within and through the town;
- Interconnecting vehicular, pedestrian, and bicycle routes;
- Installing cautionary signage at all points of pedestrian/vehicular conflict;
- Enhancing the pedestrian environment to encourage walking by providing benches, sitting areas, and decorative planted areas in appropriate locations along the routes;
- Providing secure bicycle parking facilities at popular destinations, i.e., Chestnut Bend, Borough parks, downtown, government complex, houses of worship, schools, etc.; consider an enclosed bicycle parking facility at Chestnut Bend for those who leave their bicycles for long periods of time;

* As defined by the settlement between the Environmental Defense Fund and United Water Resources.

- Interconnecting cul-de-sacs and disconnected streets via non-motorized paths to improve circulation, accessibility, and connectivity between neighborhoods where possible by use of Borough rights-of-way and where the privacy of residents is not compromised;
- Linking public parks and undeveloped public lands with trails.

3.2.5.3 Reduced Auto Use

- Promoting walking, cycling, and multi-store shopping locally for those items available from Haworth retailers;
- Encouraging the continuation of the present locally owned one-of-a-kind businesses in the Downtown area;*
- Encouraging the reservation of the ground floors [street level] of Downtown buildings for retail businesses with offices being located on upper floors;
- Promoting carpooling by establishing a signup on the Borough's website to match residents and destinations.

3.2.6 Waste Management & Recycling

The intent of the Plan is to reduce and manage waste in a more environmentally sensitive and sustainable manner by expanding and promoting all viable forms of recycling and by adopting Best Practices in the reduction of non-recyclable waste. Specific recommendations would include, but not be limited to, the following:[†]

3.2.6.1 Increasing Residential Recycling Involvement and Compliance

- Promoting and enhancing the convenience of voluntary recycling by maintaining weekly curbside pickups augmented by providing a drop-off site for leaf compost at the Haworth Department of Public Works (DPW);[‡]
- Conducting research to identify and increase the number and variety of materials that could be recycled in a cost-effective manner;[§]
- Reviewing the current Recycling Ordinance to include the following, provided that effective means for supporting compliance are established as noted:
 - Used oils, including both motor and vegetable oils, by providing a convenient location [eg., Haworth DPW Yard] for collection and disposal;

* See Haworth Master Plan, Land Use Element 1.2.5.2 [2006].

[†] For a more complete discussion of the environmental, economic, and practical issues involved in recycling, see **Sustainable Haworth 2012** and the resources referred to therein.

[‡] Note that some communities have enlisted Boy and Girl Scouts and other volunteers to assist senior citizens and others who might find recycling difficult or inconvenient to set up home collection points and bring recycling containers to the curb for municipal collection.

[§] "Cost-effective" means that the Borough either receives payment for the sorted material or that the cost to the Borough for the disposal of said material is less than that of conventional trash disposal. Potential sites for the disposal of recycled materials may be found through NJDEP.

- Appliances [‘white goods’], which can be collected locally and trucked to the Bergen County Utility Authority site for dismantling and disposal;
- Batteries, which can be collected locally and transported to a licensed hazardous disposal site;
- Consumer electronics, which can be collected locally and transported to a licensed hazardous disposal site or to the Bergen County Utilities Authority;
- Paints and other chemicals, which can be collected locally and transported to appropriate licensed or public facilities for disposal.
- Establishing a sticker warning system for violators who place recyclable materials in the trash, leading to appropriate sanctions for repeat violators.

3.2.6.2 Reducing Waste through Increased Composting

- Encouraging home composting of kitchen waste;*
- Encouraging subsurface dog waste composting barrels [bottomless cylinders].

3.2.6.3 Reducing Waste through Community Education

- Encouraging residents to “cut it and leave it” for grass cuttings;
- Permitting professional landscapers to “cut it and leave it” under controlled conditions that do not disturb neighboring property owners or properties;
- Creating and publicizing a Borough-wide anti-littering campaign;
- Publishing periodically in the Town Newsletter the comparative costs to the Borough of waste disposal versus recycling.

3.2.6.4 Increasing Construction and Demolition Waste Recycling

- Enforcing the existing Construction and Demolition Recycling Ordinance to encourage finding alternative uses for construction and demolition waste and to avoid overstressing landfills;
- Adding vegetative waste to the materials listed in the Ordinance as not to be landfilled, requiring that vegetative waste be composted, chipped, or cut into firewood for reuse;
- Establishing clear guidelines and Best Practices for the disposal of construction and demolition waste that is not landfilled, including, but not limited to the following:

* Home composting reduces the amount of waste and the costs of collection and management of the landfill system, creates high quality compost for home gardens, and reduces the need for Commercial compost. Home composting bins are available at reasonable costs from governmental and environmental organizations. See ANJEC, Sustainable New Jersey, or the Bergen County Environmental Council for information.

- Masonry – can be buried on the property if crushed;
- Wood – cannot be buried but must be disposed of or recycled;
- Gypsum board, wallboard, and metals cannot be buried but must be disposed of or recycled.

3.2.6.5 Increasing Recycling and Reuse in Municipal Operations

- Continuing to collect autumn leaves with vacuum trucks;
- Creating a program to distribute decomposed leaf compost to residents at a reasonable cost;
- Continuing using a chipper machine to chip collected branches and tree limbs and then redistributing the wood chips for mulch;
- Continuing with a mulch-producing company for the collection and removal of grass clippings that are not left on lawns or carted away by private landscapers^{*};
- Providing recycling containers in the downtown and in other public gathering places (i.e., parks) and locating them adjacent to trash receptacles;
- Reducing paper utilization and waste by increasing municipal electronic record-keeping and communications, including the recording and distribution of minutes, correspondence, application materials and the like via email;
- Using recycled paper and other recycled materials whenever possible;
- Assembling and disseminating comprehensive information on Best Practices in fertilizer use to be implemented by the DPW, residents, and private landscapers[†];
- Maintaining municipal vehicles properly to reduce gas and oil drippings and shavings from brake linings.

^{*} The New Jersey Meadowlands Commission can provide information on such companies that compost grass in locations where neighborhoods would not be subjected to objectionable odors generated by the composting system.

[†] See the Agricultural Extension Agency for complete information.