Indiana Association of Cities And Towns
Green Communities Initiative - 2013

Explanation and purpose of this program

Sustainable development concepts, low impact development, energy conservation programs, and similar management approaches can all be considered part of a "green" program for a municipal government. Green programs are valuable to our environment and to our bottom line. In a time of extreme needs to cut costs at the municipal level, many green concepts **can save a community money, while simultaneously conserving environmental resources and improving the quality of life for a community. Improved quality of life, in turn, can help support economic development goals.**

This is IACT's sixth year implementing the Green Communities Initiative for the collective purposes of:

- Improving awareness about green options and how to implement them
- Promoting municipal efforts through a peer recognition/awards program
- Awarding the most aggressive green programs (categorized by the following population categories – note some questions are not required for scoring for smaller population communities):
    - Community with population of 50,000 or greater
    - Community with population: 10,000 to 49,999
    - Community with population: 5,000 to 9,999
    - Communities with population: 1 to 4,999

This Initiative is comprised of:

- An increase in the number of workshops offered each year that are focused on environmental programs, their value, and how to implement them (offered only to increase educational opportunities, but not a requirement to participate in awards program)
- A survey that can be completed by communities who are interested in meeting the program criteria (required to participate in awards program)
- An awards program that recognizes those communities who meet minimum criteria and annually honors one community that has done the most in this area.

The program has been designed to be general and applicable to communities of ALL sizes. Since IACT may oppose the basis of current (or future) regulatory compliance programs, such as certain elements related to CSO requirements, the survey and awards program **DO NOT** address environmental ***compliance*** issues; rather, they address those programs that go above and beyond regulatory compliance and permits from a municipal program and project perspective. Since legal and policy challenges may be rooted in what IACT feels to be legitimate opposition or disagreement, this program IS NOT CONCERNED with whether or not a community's NPDES permit, air quality compliance, or other regulatory program is up-to-date, in court, under negotiation, etc.

"Quality of Life" is often considered as a criterion for green programs. Quality of life, by itself, is not specifically surveyed here. For the purposes of this survey, it is assumed that a "better" quality of life would result from the green programs discussed.

Ideas, success stories, and cost savings that this program has identified thus far are available online.

Completing this survey:

- For consideration for recognition or an award in 2013, **Surveys MUST be completed online by July 31, 2013.**
- While others in your community may help complete the survey, it must be submitted and approved by the highest elected official of your community.
- This survey must be submitted online as a PDF document. ANY ATTACHMENTS MUST BE PROVIDED AS ONLINE LINKS OR AS SCANNED ATTACHMENTS.
- It is important that you provide some form or reference to certain answers. General questions, such as "do you have a plan?" should be answered with some level of detail, rather than just "yes". This will ensure that, for example, that your "plan" to implement a program, is not just an idea, but a legitimate plan put in place to be implemented.

Questions are grouped into the following sections of:

- **"Procurement**" (i.e., this section is best answered by those involved in the procurement of products or services),
- **"Operations/Practices"** (i.e. procedural actions, policies, processes, etc. within your municipality that consider environmental impacts),
- **"Measuring Success"** (i.e., how do you track or measure the value and success of such programs), and
- **"Recent Projects or Programs"** (i.e., specific projects that the community is proud of and would like to expound upon)

As the Green Initiative progresses, data from surveys (such as examples of successful efforts, how communities implemented their own projects/programs, etc.) will be collected and consolidated into a database. The purpose of the database will be to build an Indiana-based source of information that can be shared to all IACT members. This will help perpetuate and grow the peer-educational component of the Green Initiative.

Surveys should be submitted electronically, in accordance with the instructions provided

Questions should be submitted to iactgreen@citiesandtowns.org

Deadline for Survey Submittal is July 31, 2013
Submittal of your completed survey authorizes IACT to reproduce and publish your survey so that other IACT members may learn from your experiences

How will my survey be scored?

IACT's Green Team has devised a scoring system and associated minimum criteria for consideration of being an IACT "Green Community". Here is how your survey will be judged:

- All completed surveys will be reviewed by all members of the IACT Green Team, unless there is a potential conflict/bias for projects by a team member (i.e., team member designed projects for the community submitting the survey).

- Most questions include a requirement for "explaining" your answer or referencing city code, etc. This is necessary because the question could otherwise become subjective. For example, if you are asked if you have a "plan" or "incentive program" for a particular effort or program; we want to know that this is a real document rather than just an idea someone has. Points will only be given to questions that are answered completely, where explanations, examples, or references are requested. Remember, IACT will be sharing information from these surveys to all IACT members, in an effort to improve awareness and understanding of opportunities, their real value, and how to implement them.

- Each question will be worth *up to* 1, 2, 3 or 5 points. In other words, some questions may only be worth 1 point while others may have a maximum point threshold of 2, 3 or 5. Point thresholds are based upon the required level of effort as well as the level of impact the community's effort would have compared to other survey questions. The number of points available is listed at the end of each question.

- Each member of the team of judges will score the answers to each question from 1 to 2, 3, or 5, based upon the minimum basis for any points (yes or no answer) with additional consideration to the level of effort, progress, initiative, etc. for the remainder of the question.

- The "Recent Projects, Programs, or Policies" Section is worth up to an additional 20 points.

- Points for each question will be then be averaged among the judges. The highest score and the lowest score for each community will be removed from the total, prior to averaging. The average for each question will then be added up for a total score for each community.

- A minimum score must be achieved to meet the criteria necessary to be recognized as an IACT Green Community for the year the survey is completed. There are **203 total points available** in the survey. However, there are a few questions that realistically do not or cannot apply to smaller communities. Therefore, the point totals for those questions have been removed from the total possible points for certain sized communities; however bonus points are available for these initiatives. Reference is made to those particular questions in the survey, and it is noted what size communities do not need to answer those

questions. **Minimum point totals required for meeting the 2013 minimum criteria are as follows:**

- Community with population of 50,000 or greater: 110
- Community with population: 10,000 to 49,999: 107
- Community with population: 5,000 to 9,999 99
- Communities with population: 1 to 4,999 74

Future years will have higher minimum point criteria.

- A plaque acknowledging each "IACT Green Community" will be awarded to each community meeting the minimum score during the IACT Awards Luncheon.

- The community with the highest score among all submittals (within each population category) will be awarded the "IACT Green Community of the Year Award" for the year of the submittal. Both a plaque and a road sign acknowledging the award will be given to the winner(s).

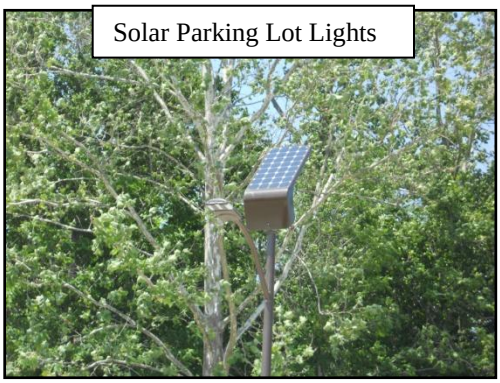
SURVEY QUESTIONS
IACT 2013 Green Communities Initiative

Return electronically in accordance with instructions

Name of City or Town:	**City of Carmel**
Population:	**81,534**
Highest Elected Official:	**Signature:** Jim Brainard
	Printed Name: Mayor Jim Brainard
Date:	**July 31, 2013**

PROCUREMENT

P1. In the current calendar year, have you or do you plan to install or implement any alternative energy sources? (wind turbines, solar energy, Bio-fuels, geo-thermal, green power credit or renewable energy certificate, etc.) ***Please list examples below***
Points: up to 5


Solar Parking Lot Lights

The City of Carmel Utilities built a new water plant that went online in 2012. The Office and Laboratory areas at the plant are heated and cooled by geothermal technology utilizing treated groundwater. This is the first water plant in Indiana to utilize geothermal heating/cooling from treated water. The parking lot and exterior lights at the new water plant are powered by photo voltaic power (solar).

P2. Are renewable energy choices available to your citizens (offered in the private sector), possibly as a result of municipally-led policies or other promotional programs? If yes, do you promote renewable energy options to your community residents and businesses? ***Please describe below***
Points: up to 5

The City of Carmel organized a highly publicized press conference on May 8, 2006 to announce the availability of E85 fuel at the Crystal Flash station in Carmel. By making the availability of E85 fuel convenient for Carmel residents and heavily promoting that availability, it encourages residents to purchase flexible fuel vehicles. Since that time, E85 fuel is also available at the Carmel Meijer store.

The City is a member of the Central Indiana Clean Cities Alliance (CICCA), and has worked with that organization to promote the use of E85 and Bio-Diesel fuels. The Carmel-Clay Schools, which has partnered with the City to share fueling stations, also has Bio-Diesel fuel available. CICCA is involved with the I-65 Shore to Shore (Chicago to the Coast) E85 Fuel Corridor Initiative.

The City of Carmel and Duke Energy are moving forward with a partnership to build infrastructure that provides electric vehicles with stations to recharge in Carmel City Center. The Carmel Redevelopment Commission has been instrumental in bringing the stations to City Center. Two Siemens Level 2 commercial charging units have been installed on the first level of the parking garage at The Center for the Performing Arts. The installation of the charging

stations is another step in Carmel's efforts to help the environment. The electric vehicles visiting the City Center charging stations will contribute to helping the environment as they produce fewer tailpipe emissions than gasoline powered vehicles. These charging stations also play an important role in securing energy independence. The stations are part of Project Plug IN, a Duke Energy pilot program designed to collect data about vehicle usage and charging activity, as well as the technical performance of vehicles and equipment. Duke Energy is also interested in learning more about the impact of such charging stations on the electrical power grid. The partnership between the City of Carmel and Duke Energy is for a two year term, with a possible one year extension.

Electric Car Charging Station

The City of Carmel provides information to community residents and businesses and promotes renewable energy options through press releases, websites, and social networking.

P3. Does your municipality encourage or require compliance with the *Dark Skies* initiative? *Provide reference of code or other means of requirement or encouragement*
Points: up to 5 (communities from 1-9,999 are not required to answer this question, however, extra credit may be received for this initiative)

The City of Carmel requires a submission of a site light plan for new commercial developments and restricts the average illumination for site lighting as well as illumination levels at the property line in certain overlay zones. These ordinances can be found in Chapter 23B.13; Chapter 20G.04.04; Chapter 23C.12 and Chapter 23F.12 of the City of Carmel Codes and Ordinances.

P4. Have you replaced or do you have a plan to replace any of your energy consuming equipment with high efficiency (high performance) equipment in the current or past calendar year? (lights, chillers, street lights, traffic lights, boilers, low flow water valves) *Explain; give examples or details of the plan*
Points: up to 4

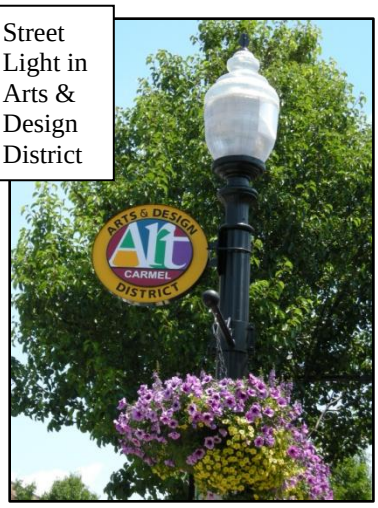
District Heating & Cooling/Energy Center:

Energy Center Line

District heating and cooling systems (DHC) are more environmentally friendly and energy efficient than individual building boilers and chiller systems. The City of Carmel and the Carmel Redevelopment Commission were proactive when designing Carmel City Center as they incorporated a district heating and cooling system in the project. That DHC, which is referred to as the Energy Center, provides heating & cooling for the Palladium and surrounding buildings. To take advantage of the DHC, the HVAC systems in City Hall, the Fire Headquarters building, and the Police Headquarters building have all been upgraded to more efficiently deliver heating and chilling services using the nearby DHC. The new systems use less energy because they rely on the delivery of heated and chilled water from the energy center, which eliminated the need for chiller towers and significantly reduces the amount of electricity required for those functions. There has been an initial savings of over 37% in heating and cooling bills for these locations.

LED Lights:

In a positive step toward improving energy efficiency and protecting the environment, Mayor Jim Brainard signed an Executive Order in 2010 requiring the use of Light-Emitting Diodes (LED) on all light bulb replacements in City-owned buildings and facilities. This order is to take advantage of the energy savings that LED lights offer without exposing the environment to the potentially harmful mercury waste that is present with other energy efficient lighting. City of Carmel Executive Order JB – 2010 - 2 requires that replacement of lights as they fail will be accomplished with LED energy efficient light bulbs or devices. This is an ongoing process.



Street Light in Arts & Design District

The City Street Department was awarded a Department of Energy grant to replace all street lights with LED lights. Beginning in September 2009, the Street Department has replaced 997 City-owned lights with the help of the grant and is on track to replace the remaining lights in 2013.

P5. Do you presently have a buy local policy for manufactured products (i.e., construction materials, cleaning supplies, paper products, etc – consider within 500 miles to be "local")? *Explain*
Points: up to 3

No

P6. Does your municipality have a green/recycled purchasing policy? *Explain/provide examples*
Points: up to 5

Yes. City Hall chooses to use environmentally preferred products to make less impact on the community in which we live. Many of the products used at City Hall, which are provided by Kimberly-Clark Professionals and HP Products, are approved by the Environmental Protection Agency (EPA). The EPA approves products by evaluating a product's overall environmental value and its level of post consumer waste. A product's overall environmental value takes into account the amount of recyclable material in the product as well as how the product affects the environment as it is made and after it is used.

City Hall currently uses several environmentally preferred products. Some of those products include hand soap, toilet paper, trash bags, and paper hand towels.

<u>Hand Soap</u>
City Hall uses foam soap, which is better for the environment due to increased efficiency. The foam soap allows employees to use less soap for each use, thus one box of soap lasts longer. Since fewer boxes of soap are used, packaging for soap decreases and therefore creates less material waste.

<u>Toilet Paper</u>
City Hall uses coreless rolls of toilet paper. Since the rolls do not have the cardboard center, it is more environmentally friendly, saving more trees by using less packaging material. The coreless rolls of toilet paper also have twice as much paper on them, which means fewer orders are needed resulting in less packaging materials.

<u>Trash Bags</u>
City Hall's trash bags are made from recycled plastic, which allows for decreases in plastic waste.

<u>Light Bulbs</u>
In accordance with the Mayor's 2010 Executive Order, all failing light bulbs are replaced with LED bulbs.

Paper Hand Towels
The paper towels used in City Hall are partially made from recycled material. It is actually more environmentally friendly that the paper towels are not made from 100 percent of recycled materials since that would lead to less absorbency and an increase in the amount used, which would increase the number of paper towels produced and disposed.

MUNICIPAL OPERATIONS/PRACTICES

O1. Does your municipality have a designated person who is coordinating all "green" initiatives or ensuring green considerations are part of planning and design? This could be *any* existing position, with the additional responsibility assigned to them. *Provide name, responsibilities, and title, and contact information (for a future peer-sharing database) below*
Points: up to 3

There are currently two individuals who work together and coordinate the green initiatives for the City of Carmel:

Sue Maki, LEED AP ND
Manager of Customer Relations & Education
City of Carmel Utilities
760 Third Ave. SW
Carmel, IN 46032
317-571-2673
smaki@carmel.in.gov

Alexia Donahue-Wold, LEED AP BD & C, AICP
Planning Administrator
City of Carmel Department of Community Services
One Civic Square
Carmel, IN 46032
317-571-2425
awold@carmel.in.gov

O2. Does your municipality actively educate municipal employees and citizens about local environmental issues (above and beyond permit-required education programs)? *List examples*
Points: up to 3

Publications

The City of Carmel Utilities prints a Quarterly newsletter called *The Full Circle.* In that newsletter residents are educated on various topics of an environmental nature such as water use efficiency; household hazardous waste disposal; recycling; proper disposal of fats oils & grease among others. Copies of past newsletters can be viewed on the City website, www.carmel.in.gov under the Utility Department, newsletters tab.

The City periodically includes bill stuffers in utility bills. The stuffers can focus on an environmental subject and topics have included our storm water management, recycling centers, household hazardous waste disposal site, and most recently, education about fertilizing and runoff issues.

Events

Public Safety Day

Smart Irrigation Workshop

In July 2012, the City sponsored a Smart Irrigation workshop collaborating with the Carmel Clay Public Library. The workshop focused on efficient watering techniques and native landscaping.

Public Safety Day

The City of Carmel Fire and Police Departments annually hold a Public Safety Day. All City Departments are invited to participate. The event is held in collaboration with St. Vincent Carmel hospital and over 5,000 people attend. The City's Engineering, Utilities, Community Services and Parks Departments all have environmentally focused displays and activities.

CarmelFest Booth

CarmelFest

The City of Carmel has a large booth at CarmelFest the community's 4th of July Celebration. Environmental education information is shared at the booth including 2013 with a focus on recycling. Over 50,000 people attend the various events at CarmelFest over the 2 day period.

O3. Does your municipality offer its citizens curbside (or drop-off) recycling for household or business wastes, yard wastes, etc. *Please describe*
Points: up to 5

Curbside Recycling

Curbside Recycling

Starting in 2012, the City of Carmel implemented a city-wide trash and recycling program for all households in the City. This new program provides the availability of curbside recycling with trash service under a new contract with Republic Waste Services. Previous to the implementation of this program, approximately 25 percent of residents subscribed to curbside recycling with their

trash provider. Now curbside recycling is included with the new city-wide contract that is available to all residents living in homes and townhomes. Periodic audits reveal that 85% of the residents recycle on a regular basis.

Electronics Recycling

Twice a year the City of Carmel Utilities sponsors an electronics recycling event in collaboration with the Carmel Area Roots & Shoots a High School Environmental Program. These events have continuously grown and our most recent event resulted in almost 1,000 residents disposing of electronics, appliances and other items for recycling. The two annual events are held around Earth Day in April and America Recycles Day in November. The past two events have resulted in over 28 tons of electronics and large appliances that have been diverted from area landfills.

Public Electronic Recycling Day

O4. Do municipal operations require recycling of materials, office supplies, etc within the *municipal* operations? *Explain to what extent this policy is applied*
Points: up to 3

The City of Carmel has recently moved to Republic Waste Services for waste handling for all municipal locations. As part of this service, Republic Services provides 96 gallon recycling carts to all locations to facilitate easy recycling.

O5. Does your municipality have an active brownfields program that identifies, mitigates as appropriate, and seeks redevelopment rather than green field construction? *Explain and provide examples*
Points: up to 5

The City of Carmel elected and planning officials take smart land use utilization very seriously. As areas become under-utilized particularly due to environmental issues, the City takes appropriate action to return that area to a viable part of our city.

Our most recent brownfield remediation activity has taken place in our mid-town area of Carmel. Located between the Arts & Design District and Carmel City Center, Mid-Town was home to an abandoned grain mill and supporting structures. The city did the necessary testing and subsequent demolishment of the grain mill and supporting structures. This is one of the first steps the City is taking in connection with the revitalization of that area.

BEFORE –
Vacant Kroger Grocery Store

One of our most visible brownfield development project is Carmel City Center. Mayor Jim Brainard had the vision of turning a vacant Kroger grocery store and the surrounding blighted area into a vibrant new downtown. Carmel City Center is an eighty-acre, mixed-use development located in the heart of Carmel. A destination like no other in central Indiana.

The project offers the appeal of a neighborhood with the vibrancy of a downtown. Carmel City Center features luxurious residences, specialty retail and restaurants, premier office space and is the location for The Center for the Performing Arts which includes a world class, 1,600 seat concert hall; a 500 seat multi-purpose theatre; 200 seat studio theatre; and an outdoor community amphitheater.

AFTER-
Carmel City Center

The Center Green in Carmel City Center is also the home of the Carmel Farmers Market. This pedestrian-based master plan development has cultural and civic programming showcased within a spectacular setting with fountains, gardens and public art. The Monon Greenway, a nature recreation trail, frequented by walkers, runners, and bikers is featured in the center of the development and future plans include a boutique hotel. A central trash collection system was built into Carmel City Center so that many different dumpsters and trash pickup sites have been eliminated. Carmel City Center also offers convenient parking garages.

O6. Does the municipality reuse existing buildings or promote the reuse of existing buildings – public or private? *Provide examples*
Points: up to 3

The Carmel Parks & Recreation Department in part is housed in three buildings along 116th Street. These buildings are all former private residences. Rather than tear the houses down and build offices, Parks opted to convert the houses into offices and meeting space. In addition to the three houses, the Carmel Police Department converted an outbuilding on the Parks premises to an office and garage for the motorcycle unit. The City of Carmel also owns several buildings in the older part of town. In the case of these buildings, rather than tear them down

and sell the land, the City leases them to local non-profit organizations. One is leased to the Carmel Community Players for $1 per year.

The City of Carmel also has a Zoning Ordinance in place that protects historically significant buildings from demolition in the older, more central portion of Carmel called Old Town. Chapter 23D of the Carmel Zoning Ordinance is meant to protect the historical character of Old Town as well as foster rehabilitation and development in this area. The demolition clause prohibits any Contributing Building from being demolished without the consent of the Director of Community Services. This section of the ordinance is meant to help preserve the historical character of one of the oldest areas of the City, while also encouraging the reuse of these buildings.

O7. Provide examples of green initiatives your municipality offers incentives for (to the private sector) for green build projects, green roofs, LEED certified buildings, etc (i.e., tax incentives, expedited permitting, etc) ***describe the incentive below***
Points: up to 5

While there currently is not a formalized incentive plan in place, the most recent project built for redevelopment in our Arts & Design District is a LEED Registered project. The building complex on Main Street is finished and the goal is for it to be LEED certified.

Additionally, two City staff members have a LEED Professional Accreditation. Sue Maki is in the Utilities Department and she is a LEED AP, ND and Alexia Donahue-Wold is in the Department of Community Services and she is a LEED AP, BD&C.

O8. Provide examples of green initiatives at municipally-owned facilities have (or are planned to have) green build projects, green roofs, LEED certified buildings, renewable energy features, etc? ***Specify facility location(s)***
Points: up to 5

Geothermal Unit

The City of Carmel Utilities constructed a new water plant at 4915 East 106th Street. Some of the environmental features of this new water plant include:

- LEED Registered
- Parking lot and exterior lights powered by photo voltaic power (solar)
- Office and laboratory areas heated and cooled by Geothermal technology utilizing treated groundwater (This is the first water plant in Indiana to utilize geothermal heating/cooling from treated water.)

Mayor Jim Brainard has encouraged Carmel Utilities to develop the technology to use recaptured methane gas to power the Carmel Wastewater Treatment Facility. Carmel installed the first municipal BioPasteur system in the U.S. to process solid biological waste (sludge) from municipal wastewater. With that process, it produces Class A biosolids which can be blended with soil and other materials to produce a form of topsoil. Fertilizer produced through the biosolids process is currently being used by local farmers. The BioPasteur system began operating at Carmel's Wastewater Treatment Facility at 96th Street and Hazel Dell Parkway in October 2005.

O9. Do your municipal buildings utilize low (water) flow fixtures?
Points: up to 3

Yes, City Hall and many of our ancillary buildings have low flow faucets, toilets and shower heads.

O10. Does the municipality reutilize gray water for reuse (i.e., irrigation use), etc.? *Give examples/explain*
Points: up to 5

No

O11. Does the municipality have a water management plan that includes a conservation ordinance that addresses watering lawns, etc. during periods of drought or low precipitation and automated meter reading? *Cite code below*
Points: up to 5

Our conservation ordinance is below. It is ordinance A-60.

§ 9-10 Four Levels of Conservation.

In order to implement a water conservation program appropriate to the needs of the utility and its users, the following levels of conservation are established:

(a) Level 1—Voluntary Conservation.

(b) Level 2—Restricted Water Use.

(c) Level 3—Prohibited Water Use.

(d) Level 4—Water Rationing.

(`91 Code, § 9-10) (Ord. A-60, § D, 7-6-88)

§ 9-11 Level 1—Voluntary Conservation.

This Level shall consist of a request by the Mayor to the users to engage in conscience efforts to reduce water consumption by practicing conservation techniques and suggesting meaningful action to be taken until such time as the existing water problem is resolved.

(`91 Code, § 9-11) (Ord. A-60, § D-1, 7-6-88)

§ 9-12 Level 2—Restricted Water Use.

(a) Level 2 shall be comprised of methods of restricting water usage by users to such times, terms and conditions as the Mayor and/or Board shall determine appropriate. Level 2 does not contemplate a severe water shortage in the immediate future, but rather that mandatory conservation methods must be imposed to insure adequate water and pressure for future needs.

(b) The users shall be requested to cease or reduce water use for such items, including but not limited to: sprinkling, irrigating, or watering lawns, ground cover, gardens and other landscaping, washing of automobiles, trucks, homes or other non-essential equipment, the operation of ornamental fountains, wading and swimming pools (which do not employ a filter and recirculation systems) and such other non-essential uses as may, from time to time, be determined by the Board.

(c) Special consideration shall be given regarding those persons whose businesses or livelihoods require a constant supply of water on a regular basis. These businesses include but are not limited to: Car Washes, Garden Centers and Restaurants.

(`91 Code, § 9-12) (Ord. A-60, § D-2, 7-6-88)

§ 9-13 Level 3—Prohibited Water Use.

(a) Level 3 prohibitions shall preclude the use of water as announced under any preceding Level 2 restriction(s). Additionally, users shall be subjected to additional prohibitions which will be determined by the Board as conditions and needs dictate, but shall not include water rationing.

(b) Unless an emergency exists, the Mayor shall call a special joint meeting of the Board and Common Council prior to the Utility adopting a Level 3 Water Conservation condition. In the event that an emergency exists or it is impractical to call a special joint session of the Board and Common Council, the Mayor may declare a Level 3 water condition but, shall convene the special joint session as soon thereafter as possible.

(`91 Code, § 9-13) (Ord. A-60, § D-3, 7-6-88)

§ 9-14 Level 4—Water Rationing.

(a) Water rationing shall occur when the Utility cannot reliably provide water or pressure to its users by any practical means other than imposing specific allocations of waters on the users, in such amounts that are determined equitable by the City.

(b) Unless an emergency exists, the Mayor shall call a special joint meeting of the Board and Common Council prior to the Utility adopting a Level 4 water condition. In the event that an emergency exists or it is impractical to call a special joint session of the Board and Common Council, the Mayor may declare a Level 4 water condition, but, shall convene the special joint session as soon thereafter as possible.

(c) After the establishment of the Level 4 water condition, the Board, upon the advice of the Mayor, shall advise the users of the amounts of water that will be permitted to the user and the method of water distribution or control.

(`91 Code, § 9-14) (Ord. A-60, § D-4, 7-6-88)

§ 9-15 Notice of Water Conservation Level to Users.

(a) In order to inform users of the water conservation level in effect the Utility shall give its users notice as soon as it is practical. The following guidelines shall be adhered to by the Utility, unless otherwise provided, or an emergency exists making full advance notice impossible or impractical:

(1) Level 1 - Notice shall be given to the Local Newspapers, Radio, TV and Cable Stations requesting user compliance in accordance with Level 1 restrictions;

(2) Level 2, 3 and 4 - Written notice shall be sent by the Utility to each user, at their last known address, by first class mail, postage prepaid. In addition the Board shall advise the Local Newspapers, Radio, TV and Cable Stations of the declared conservation level. A pre-recorded tape or tapes may be prepared by the Utility and distributed to WHJE and/or any other local radio station or cable station to provide an up-date to users of the water situation.

(b) Contents of Notice: Each notice sent to a user or distributed to the press shall contain at least the following information:

(1) The conservation level declared and water use prohibitions that level imposes on the users;

(2) The enforcement remedies available to the City in the event a person violates the restrictions of the declared conservation level;

(3) A telephone number or other information advising the user where questions may be answered or more information obtained, including radio stations which may carry a pre-recorded broadcast;

(4) Such other information that may be deemed relevant.

(`91 Code, § 9-15) (Ord. A-60, § E, 7-6-88)

§ 9-16 Enforcement—Citations and Fines.

(a) Every user shall be subject to the enforcement provisions provided in this division with the exception of the Carmel Fire Department, and any state licensed health care provider(s) which are or have been declared accepted by the Board.

(Ord. A-60, § F, 7-6-88)

(b) Any person violating the provisions of a Level 2 water conservation shall be subject to a first time written warning by either the City Metropolitan Police Department or a Municipal Utility Employee, or such other authorized and designated employee of the City. In the event said user continues to violate or subsequently violates the water conservation restrictions imposed by Level 2, that person shall be cited with a written citation and subject to a fine up to $250.

(Ord. A-60, § F-1, 7-6-88)

(c) A person who violates water conservation Levels 3 or 4 shall be cited by the Carmel Municipal Metropolitan Police Department or Municipal Utility Employee, or such other duly authorized and designated employee of the City, with violation of this section. A fine may be imposed against said violator in the sum up to $250. Additionally, the Utility shall disconnect the water service to any such user or customer, at the time the citation is issued, or as soon thereafter as possible. Water service shall be recommended upon the payment of a reconnection fee in the sum of $100.

(Ord. A-60, § F-2, 7-6-88)

(`91 Code, § 9-16)

O12. Do you currently have programs or policies in place to reduce storm water runoff (i.e. rain barrels, rain gardens)? Cite program or policy.
Points: up to 3

Carmel City Hall Rain Garden-2009

The City of Carmel maintains two city rain gardens, the first of which was started in 2009 and the second in 2010. Each rain garden includes educational plaques. The City also has designated No-Mow Areas. The construction of roundabouts throughout the City (less impervious surface and more plantings/ grass than a standard signalized intersection) is one way the City reduces stormwater runoff. Also, the stormwater technical standards encourage green practices (see O20 below) which help stormwater infiltrate into the ground.

Carmel City Hall Rain Garden-2010

O13. Has your community created a Plan to reduce the projected amount of future water supply needs of treated water by any of the following?: water conservation (residences, institutional and commercial), remote meter reading & recording & water loss detection/elimination, significant City water reduction practices, restrictive water rates during drought conditions etc. and, if the answer is yes, how has the public been made aware of this Plan? *Provide details below*
Points: up to 5

Irrigation Management

Irrigation is the primary driver of our peak demand for water. Approximately one-third of our customers have automatic irrigation systems, which is a huge percentage for the Midwest. Approximately 65 percent of our summertime water use is for irrigation. To help curb the water demand from irrigation, the City of Carmel Utilities has partnered with the Irrigation Association and the WaterSense program to promote efficient irrigation practices.

Smart Irrigation Showcase

During Smart Irrigation Month in July 2012, the City of Carmel Utilities collaborated with the Carmel Clay Public Library and local irrigation contractors to hold a Smart Irrigation Product Show and informational sessions at the Carmel Clay Public Library. Residents were able to attend the show and learn environmentally friendly ways they can reduce their water use and still give their landscaping the water it needs. The show and

informational sessions were very well received. This program is a step forward in the process of reducing the amount of water used for irrigation. We are continuing to encourage Smart Irrigation by all residents and will be requiring the use of Smart Irrigation technology for all new irrigation installs.

New Water Rate Structure

In December 2011, a new rate and new rate structure was approved for the City of Carmel Utilities' residential water and residential and commercial irrigation customers. Previously, the more water a customer used, the price per 1,000 gallons went down. This practice did not reflect the impact that high water use had on our infrastructure and did not encourage water conservation. Irrigation and seasonal high water use have the greatest influence on our capacity expansion requirements and ongoing maintenance. To address this issue and to encourage efficient use of water, the City of Carmel Utilities revised our rate structure so it more accurately reflected the cause of the increased expense. Now, under the new structure, the price per 1,000 gallons increases after the first 8,000 gallons are used each month (An active Carmel family of four uses an average of 8,000 gallons per month). This will provide the revenue needed to expand and maintain our system so that we can keep up with the demands during peak season for irrigation watering as well as encourage efficient water use. This inclining rate structure is becoming common across the country. The community was advised of these changes through both direct mail notifications and articles in the local newspaper.

Community Education

The City of Carmel communicates with its residents in a variety of ways concerning water use.

- The City of Carmel Utilities newsletter is sent to all customers and has periodic articles on efficient water use practices and landscape watering.
- Letters were sent to large irrigation users in May 2013 regarding efficient irrigation practices and smart irrigation technology.
- Letters were sent in March 2013 to all residents regarding efficient watering practices.
- Send bill notices out periodically for Fix-a-Leak week, Smart Irrigation month, etc.
- Gave over 1,000 rain gauges out with watering information. These are handed out at community events.
- Facebook posts and Tweeter Tweets from the City of Carmel Utilities pages.
  https://twitter.com/CarmelUtilities
  https://www.facebook.com/pages/Carmel-Utilities/177439973270

Rain Gauge with Stuffer

O14. Does your municipality have a plan for sustainable growth? i.e., comprehensive land use plan that seeks to minimize urban sprawl and provide the amenities of open space or other formal plan that considers environmental impacts and sustainable development*? If so, please refer to the plan and elaborate*
(Communities from 1- 4,999 are not required to answer this question, however extra credit may be given for this initiative)
Points: up to 5

Yes, the City of Carmel completed a major update to the Carmel Clay Comprehensive Plan in 2009, also known as the C3 Plan. In Part 2: Comprehensive Plan Essence of the C3 Plan, there are several Objectives that encourage sustainable growth and environmental sensitivity. Below are a few Objectives from the C3 Plan:

- Objective 1.6: Continue to build the city park and trail system through targeted acquisition of remaining undeveloped parcels.

- Objective 2.1: Commit to high architectural energy efficient and environmental design standards for all municipal buildings and facilities. The intent is to set a precedent for quality and to establish character goals for private sector development to emulate. Developers will take cues from municipal improvements and be more likely to follow the City's lead. This commitment will also further the City's competitive advantage in the region, and increase community pride in the built environment.

- Objective 3.2: Encourage mixed-use developments where appropriate. Single-use developments tend to lack vitality during off-peak times. Mixed-use developments such as Providence at Old Meridian often combine commercial and residential uses into a single node. This type of development encourages daytime vitality from employment and commerce activity, and nighttime vitality when people come home from work. Also, this development pattern better utilizes land by allowing compact urban form.

- Objective 6.4: Promote the planting and care of canopy trees throughout Carmel. Encourage their placement even in urban streetscapes, parking lots, and other enclosed areas by promoting proper soil volumes and/or the use of constructed soil technologies. Canopy trees are desired because they add a great deal of character and comfort to the built environment. Additionally, they also provide relief from heat, soften noise and light, help purify the air we breathe, reduce stress, and increase property values. This is a particularly important objective because so many mature trees are lost through development.

- Objective 7.14: Promote the movement toward sustainable development and architecture. Encourage land developments and building designs that use or reuse land responsibly by discouraging patterns of sprawl, conserving potable water, reducing energy consumption, and utilizing reusable or recyclable materials. Encourage architects and designers to use green design standards, such as LEED (Leadership in Energy and Environmental Design), to promote sustainable and healthful buildings and neighborhoods for people to shop, work, eat, recreate, and live.

O15. Does your municipality have a zoning ordinance that enforces the growth plan referred to in question O14? *Please cite the code*
(Communities from 1- 4,999 are not required to answer this question, however extra credit may be given for this initiative)
Points*:* up to 3

Yes, the City of Carmel has a complete Zoning Ordinance and Subdivision Control Ordinance as a part of Chapter 10 of the City of Carmel Codes and Ordinances. Several chapters of the Zoning Ordinance and Subdivision Control Ordinance reference the Comprehensive Plan and use it as a tool to review new projects. For example, Chapter 24: Development Plan and Architectural Design, Exterior Lighting, Landscaping & Signage Regulations states, "The Commission shall review a Development Plan application to determine if the Development Plan satisfies the development requirements specified herein and in the applicable zoning district. The Commission's review shall include but not be limited to the following items:

1. Compatibility of the development with surrounding land uses.
    a. Consistency with the policies for the district as set forth in the Comprehensive Plan"

Another example, from the Subdivision Control Ordinance, is in Chapter 6: Standards of Design. Chapter 6.01.01states, "The subdivision layout shall conform in all essential respects with Ordinance Z-4, as amended, and elements of the adopted Comprehensive Plan for the City of Carmel, Indiana and its jurisdiction."

O16. Are you a member of IDEM's Clean Community challenge?
Points*:* up to 3

No

O17. How many active or passive recreational acres per 1000 population does your municipality have? Include areas such as: parks, trails, town green.
Points: up to 3
Is your ratio over 10 acres per 1000 residents?
Bonus: up to 2

Acres owned or managed by Carmel Clay Parks & Recreation: 502.0

Monon Greenway

This includes the following:

Monon Greenway: 5.25 miles through Carmel (dedicated trail which also connects Carmel with Indianapolis and Westfield)

White River Greenway: 2.5 miles

Hagan-Burke Trail: 1.42 miles (Multi-use path)

Greyhound Trail: 0.667 miles (Multi-use path)

Acres associated with 125 miles of multi-use paths: 151.5 (approximately)

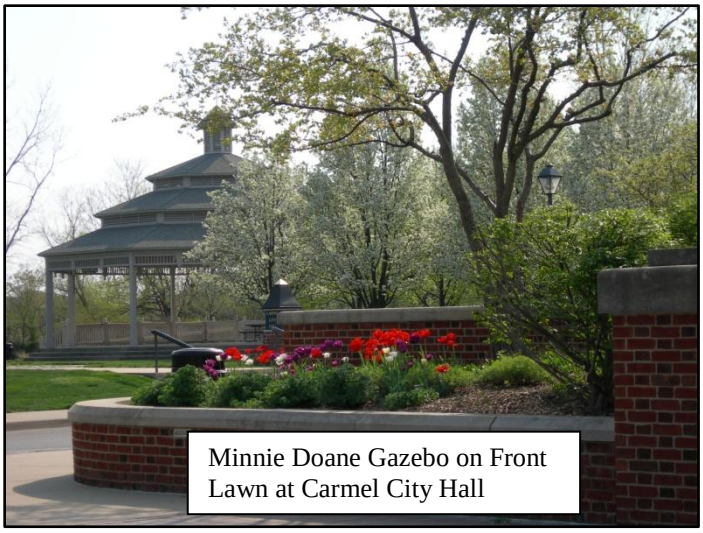
Acres within City owned by Hamilton County Parks: 188.0

- Coxhall Gardens
- River Road Park

Acres owned and managed by the City of Carmel: 135.1

- City Hall grounds
- The Center Green at The Center for the Performing Arts
- Reflecting pool at the Veterans Memorial Plaza
- Brookshire Golf Club

Total publicly owned acres of parkland: 976.6


Minnie Doane Gazebo on Front Lawn at Carmel City Hall

Approximately 12.2075 recreational acres per 1,000 Population

O18. Do you have a parks master plan that is less than 5 years old? (Communities from 1- 4,999 are not required to answer this question, however extra credit may be given for this initiative)
Y or N
Points: up to 2

Yes, Carmel Clay Parks & Recreation has a 5-year master plan. The 2010-2014 Parks and Recreation Master Plan was adopted by the Carmel/Clay Board of Parks and Recreation on December 8, 2009. On March 19, 2010, the Indiana Department of Natural Resources, Division of Outdoor Recreation confirmed the plan meets its requirements for local parks and recreation master plans. Carmel Clay Parks & Recreation is currently developing the new 5-year master plan, which will be completed and submitted prior to January 15, 2015.

O19. Do you have an urban forestry program*? Provide name of plan, date, etc.*
Points: up to 3
Are you currently a Tree City USA (or similar program) community*? Cite date of award:*
Bonus 3

Arbor Day Tree Planting

Yes, the City of Carmel's Urban Forestry Program, with its two staff members, is located within the Planning and Zoning Office of the Department of Community Services (DOCS). It is comprised of the Urban Forester, who fills the position of Environmental Planner and supervises an Urban Forestry Specialist. The Forestry Program has grown from its early beginnings in 1992, when the DOCS Planner/Landscape Architect acted as City Forester, to provide assistance on neighborhood tree planting projects and modifying city ordinances to allow trees to be planted along public streets while establishing, by ordinance, the initial Carmel Urban Forestry Committee. The Forestry Program has quickly evolved into a vital part of the Carmel community, with a trained professional staff that handles all aspects of an advanced Urban Forestry Program, with tools for each aspect of the job: trucks and a chipper, pruning equipment, a computerized tree inventory, along with partnerships with businesses, neighborhoods and non-profits. The Forestry Staff also directs the annual Arbor Day Ceremony and the Neighborhood Fall Tree Planting Project.

The City of Carmel Urban Forestry Program directs the City's tree planting and maintenance efforts through all aspects of development and manages existing tree health in all the City-owned right-of-ways. Also, the City of Carmel's partnerships (internal and external) between the Carmel Urban Forestry Committee and not-for-profit organizations (i.e. Carmel Green Initiative) allow its Urban Forestry message and achievements to be shared by the City's website and government channel as well as traditional media outlets.

The City of Carmel was selected as the runner-up (second place) for the 2008 Awards of Excellence for Community Trees Program from The Home Depot Foundation and the U.S. Conference of Mayors in the small city category (below 100,000 populations) at the annual conference in June 2008 in Miami.

Year	Award Name - Presenter	Recipient
1994-2011	Tree City USA - National Arbor Day Foundation	Forestry Program - City of Carmel
1996-2011	Growth Award - National Arbor Day Foundation	Forestry Program - City of Carmel
2002	Gold Leaf Award - International Society of Arboriculture	Arbor Day Celebration - City of Carmel
2003	Outstanding Tree Steward of the Year-Indiana Urban Forest Council	Leigh Bangs, Carmel Urban Forestry Committee
2005	Outstanding Tree Steward of the Year-Indiana Urban Forest Council	Cheryl Gettelfinger, Carmel Urban Forestry Committee
2008	Awards of Excellence for Community Trees - The Home Depot Foundation	Runner-up ($25,000) - City of Carmel and Citizens for Greenspace
2010	Indiana Urban Forest Council - Outstanding Project of the Year	Forestry Program - City of Carmel

The City of Carmel has been a Tree City USA for the last 19 years. Carmel fulfills all requirements for Tree City USA, including in 2011 spending over $10.00 per capita on trees. We are a Sterling Tree City having won a growth award from the National Arbor Day Foundation for 17 years consecutively. Carmel bears the distinction of being the city in Indiana with the longest record of consecutive growth awards (17). Approximately 1,000 street trees have been planted in the City per year over the last 10 years.

O20. Do you have a landscape ordinance that promotes native species and green stormwater infrastructure?
Y or N
Points: up to 3

Constructed Wetland

Yes, the City of Carmel Stormwater Technical Standards require all new development to install/construct two stormwater quality treatment measures or Best Management Practices (BMPs) which treat total suspended solids including sediment and trash (TSS) and the other major pollutants generated by the development. This is different from

other municipalities in central Indiana that generally only require one BMP that only treats for TSS. With this regulation, we are able to encourage developers to construct more environmental stormwater practices with their development and also green practices since they are required to treat the other pollutants such as fertilizers, car fluids, animal waste, etc. We encourage the use of innovate green stormwater practices on all new developments, such as permeable pavement , bioswales, rain gardens, native vegetation, and wetland shelves around detention ponds.

O21. Do you have a policy for pesticide management that promotes eco-friendly practices?
Y or N
Points: up to 3

Yes, the City of Carmel uses very little pesticides in their daily operations. The Street department encourages natural predators for pest management. However when infestations become severe, they do use a systemic pesticide to take care of the problem.

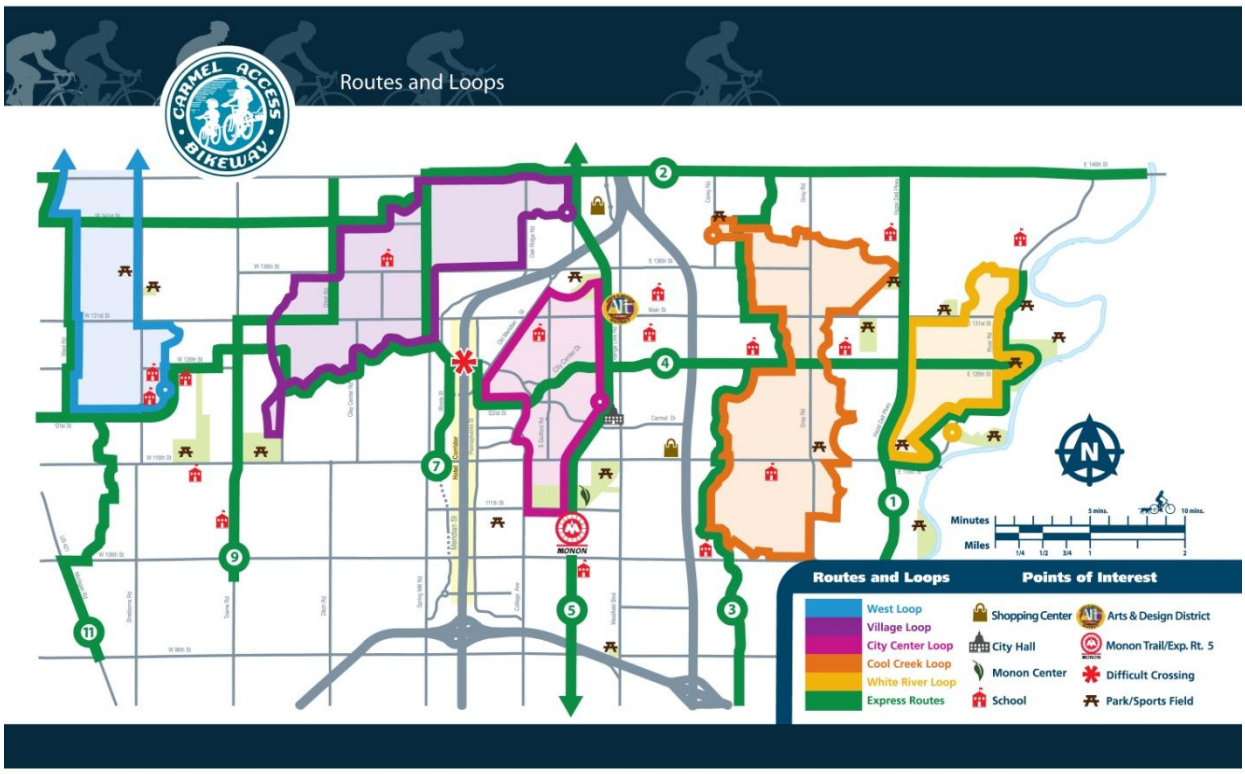
O22. Does your municipality have a program that reduces mowing or the need for mowing in parks and along right of ways? *Cite the plan or elaborate:*
Y or N
Points: up to 3

Yes, the City of Carmel Utilities has started a program to discontinue mowing of wellhead areas to reduce carbon emissions associated with mowing as well as convert the areas to wildlife habitats wherever possible. The plans are to do a few sites each year until the majority of them are converted. The Street Department has done the same for vacant lot areas. Brookshire, the City's golf course, has done this wherever possible around the property. Carmel Clay Parks also has similar policies in their parks and many of the parks have been established or converted to natural prairie grass.

O23. Do you have a multi-modal plan (or similar), traffic calming, or zoning set up for promoting mixed use, walkable options, bike to work, bike lanes, etc. ***Cite plan below:***
(Communities from 1- 9,999 are not required to answer this question, however extra credit may be given for this initiative)
Y or N
Points: up to 5

Yes, the City of Carmel employs several methods for promoting mixed-use, walkability, and bikability. One key method is the Transportation Plan which is a part of the Carmel Clay Comprehensive Plan (C3 Plan) and which the Zoning Ordinance requires all new projects to comply with (Ch. 2.09). As a part of the Transportation Plan, the Bicycle and Pedestrian Plan Map denotes where new bicycle and pedestrian facilities are necessary to fulfill the C3 Plan's goals to mitigate traffic and promote ease of travel by all modes. These bicycle and pedestrian facilities are viewed as mandatory when land is being developed and include such facilities as sidewalks, side paths, off-street trails, and even bicycle lanes.

One of the many ways the City of Carmel supports multi-modal transportation is through the Carmel Access Bikeway (CAB) system. CAB was established to provide well marked bicycle routes and loops throughout the City to encourage bicycling as an alternative mode of transportation.



Another method is the Zoning Ordinance which has several chapters that promote mixed use. One chapter is Chapter 20G: OM/Old Meridian District. This chapter not only requires the installation of sidewalks and pedestrian circulation, but it also has as specific Mixed Use Zone and a Village Zone. Both of these zoning districts permit a mix of compatible uses, including office, high density residential, and retail (limiting retail uses to the first floor of a building.) These zones also regulate building heights, setbacks and architectural design to create a compact, urban, well connected area with buildings, signage, and streetscapes that provide a pedestrian scale.

O24. Do you have preferred city parking incentive for electric or hybrid vehicles or carpool vehicles? *If so, explain*
(Communities from 1- 4,999 are not required to answer this question, however extra credit may be given for this initiative)
Y or N
Points: up to 3

No

O25. What percent of your current (and pending documented vehicle purchases) vehicles are electric, hybrid, or bio-fuel vehicles, tractors or lawn mowers?
Points: up to 5

Mayor Jim Brainard signed an executive order in 2005 requiring all newly purchased city vehicles to be alternative fuel vehicles. In cases where alternative fuel vehicles are not possible, such as large trucks and construction equipment, then the vehicles are diesel which is more environmentally friendly than regular gas.

- Total vehicles: 333
- Electric, Hybrid, or FlexFuel vehicles: 175 (Approximately 53 percent)
- The Carmel Fire Department maintains 2 fire engines and 1 ladder truck which each have a diesel particulate filter (D.P.F.) system. This system removes the heavy particulates and does not allow black smoke from the exhaust of the vehicle.
- The Street Department's vehicles use E-10+ unleaded fuel, which has 10 percent ethanol.

City of Carmel Hybrid Vehicles

O26. Does your municipality have a written policy that city employees not idle vehicles excessively?
Y or N
Points: up to 3

Yes, in 2008 the City of Carmel Executive Order JB – 2008 – 1 was ordered. It states that:

1. No driver/operator of a municipal vehicle shall cause or allow the vehicle to idle.

Key Tags – Reminder No Idling

2. The Policy shall not apply as follows:

   a. Emergency service vehicles, such as fire apparatus, police vehicles, or ambulances when active at an incident scene
   b. Vehicles standing in traffic
   c. Police vehicles which contain K-9 occupants
   d. Police vehicles which contain detainees
   e. Idling when necessary to operate auxiliary equipment that is required to accomplish the intended use of the vehicle

   f. Diesel fuel vehicles whose operational capability would be debilitated in temperatures of 20 degrees Fahrenheit or below
   g. Backhoe and sewer cleaning vehicles

O27. Does your municipality have public transportation available? *Reference the transportation program (i.e., public bus system, etc)*
(Communities from 1- 49,999 are not required to answer this question, however extra credit may be given for this initiative)
Points: up to 3

Yes, the City of Carmel actively sought and helped implement the IndyGo Commuter Express Bus Service which began March 17, 2008 and provided transportation during the weekday mornings from Carmel to downtown Indianapolis and afternoon transportation back to Carmel. The previous IndyGo Commuter Express service is now Indy Express Bus, operated by Miller Trailways. In March 2012, the Indy Express Bus reverse commute began, which provides residents in Marion County access to jobs in Carmel as well. Once in Carmel, riders can transfer to a shuttle that will transport people to more than two dozen destinations. The service continues to pick up and drop off in Carmel and make stops in downtown Indianapolis.

Announcing Indy Express Bus Service

O28. Do you have established guidelines or control systems for temperature settings for your buildings both when occupied and after hours? *Briefly explain:*
Y or N
Points: up to 3

Yes, City-owned buildings are equipped with electronic thermostats that are either manually set or controlled by a computer. The temperature settings are controlled by the time of day and expected occupancy for that day/time. The HVAC controls in City Hall, the Police Headquarters building, and the Fire Headquarters building have been upgraded so that they can be adjusted remotely by computer. They are set to automatically reduce during non-business hours.

O29. Do you have a documented maintenance program for your heating and cooling equipment to maintain peak performance of that equipment?
Y or N
Points: 1

Yes, there is a documented schedule for maintenance for our HVAC equipment at City Hall and the Police Headquarters building, as well as the Fire Headquarters building. They have quarterly scheduled preventative maintenance.

O30. Have you done an energy study of your buildings to see where you can reduce energy consumption and improve energy efficiency?
Y or N
Points: up to 3

Yes, City Hall, the Police Headquarters building, and the Fire Headquarters building have undergone an energy study in connection with their new HVAC system and the Energy Center/DHC.

O31. If O30 is yes, have you implemented any of the recommendations? *List implemented recommendations below:*
Points: up to 5

1. Use of heated and chilled water for HVAC system, instead of totally electric system
2. Regulation of levels of heating or cooling during hours when buildings are not in total operation
3. Ability to control temperature levels by zones within the buildings
4. Sensors regulating levels of light use in areas not utilized as work areas
5. Use of LED lighting throughout the buildings

O32. Do you utilize environmentally-friendly de-icing options (alternatives to salt)? *What is the alternative being used?*
Points: up to 3

Yes, the City of Carmel uses, in specific areas, potassium acetate which is chloride free. This is used around and on City parking garages. The salt that is used from Cargill is recognized by the EPA as being engineered for the environment. Cargill is constantly making the salt we use better for the environment. The Street Department is also trying the use of brine, which is only 23 percent salt.

O33. Do you have traffic configurations to reduce air emissions (traffic circles, planted boulevards, or, signalization optimization, *Explain when/where*
Points: up to 5

Roundabout at 126th Street & Keystone Parkway

Yes, the City of Carmel has built an extensive system of roundabouts, with additional roundabouts planned. These roundabouts have made Carmel a more pedestrian and bicycle friendly city and they have contributed to reduced emissions due to less idling time and gas usage. The City also has an extensive bicycle network and has increased its planting of street trees over the years.

Mayor Jim Brainard made the case for installing roundabouts in Carmel by promoting their proven safety record, cost savings, environmental friendliness and ability to smooth traffic flow. The City began installing roundabouts at some intersections in 1996 and now has more than 60 on City thoroughfares. Carmel now has more roundabouts per capita and per square mile than any other city in the United States.

The fact that there are more than 60 roundabouts in a five-mile radius makes our program unique. In addition, our Keystone Parkway project is unique in the country because of the tight configuration of its six roundabout interchanges. Our roundabouts have improved safety, saved money and reduced both auto emissions and fuel consumption in our community.

An Insurance Institute for Highway Safety (IIHS) study concluded that where roundabouts replace stop signs or intersections with traffic signals, delays in traffic can be reduced by as much as 75 percent. Roundabouts allow cars to have continuous movement as opposed to four-way intersections that require cars to stop for long periods of time while the engine idles.

Roundabout at Illinois Street & Main Street

The IIHS also estimates that residents burn 470,000 fewer gallons of gas when they don't have to wait at a four-way stop or traffic light. At an estimate of $3.50 per gallon of gas, that equals approximately $1,650,000 saved per year in out-of-pocket expenses. In addition to the monetary savings, the air quality improvement attributed to the use of roundabouts can be significant in certain areas of the country.

The City of Carmel also has an extensive network of planted medians throughout the City.

O34. Does your municipality actively/formally have a process that integrates the timing of projects (regardless of project type or which department leads), i.e., where capital improvements of different years are located at or near the same location? Do municipal departments and local utilities work together to reconsider scheduling or implementing these projects simultaneously? ***Explain and provide examples***
(Communities from 1- 4,999 are not required to answer this question, however extra credit may be given for this initiative)
Points: Up to 5

Yes, City department leaders meet regularly and discuss individual projects and coordination of those projects. When feasible, projects are undertaken so as to integrate timing.

MEASURING SUCCESS

M1. Is your municipality tracking progress on your "green" initiatives and reporting this to the public? *If so, how?*
Points: up to 3

Annual Arbor Day Event

Yes, Carmel's Urban Forestry Program continually monitors the health and status of trees, from newly planted to those long established. Each spring a comprehensive maintenance program for City streets/boulevards is bid and awarded, which includes specifications for tree maintenance, and forestry staff regularly trims, prunes and mulches trees. The City budget provides more than $200,000 each year for planting and maintenance of trees. A comprehensive forestry management plan was finalized. The plan contains "i-Tree" software, published by the US Forest Service, for inventory of trees, and for assessing and managing the health and impact of the community's urban forest

The City of Carmel Utilities Department tracks the usage of both its curbside recycling programs and Household Hazardous Waste Disposal program by the volume transported by our handlers. Previous to the citywide curbside recycling program that started this year, only about 25 percent of residents subscribed to curbside recycling with their trash provider. Now curbside recycling is included with the new city-wide contract that is available to all residents living in homes and townhomes. Additionally, City Council passed ordinance D-2065-11 mandating that all contractors providing residential trash service within the City limits of Carmel provide curbside recycling service as part of their base service. One hundred percent of Carmel homeowners and home renters now have curbside recycling service available. Annual figures of recyclables recovered by the city program will be shared and posted on the City's website. Carmel also operates a Household Hazardous Waste disposal site. It is the first municipally run permanent site in the state of Indiana. Usage in the form of tonnage disposed is tracked on an annual basis and has seen increases of volume year after year. Annual results are posted in the Utility section of the City's website.

Household Hazardous Waste Site

4th Street & Main Street Roundabout

The City of Carmel Engineering Department is currently undergoing a Congestion Mitigation and Safety study of our traditional intersections & roundabouts to reassess the delay in getting through the intersection. This will also update the statistics on the benefits of roundabouts and the reduced impact they have on the environment when compared to traditional intersections. Currently, the reduction of gasoline usage by vehicles in roundabout intersections vs. traditional intersections is 24,000 gallons a year per roundabout.

M2. Have you performed a baseline audit on how much overall energy the municipality is using?
Y N
Points: up to 3

No

M3. Have you set goals for the reduction of energy use? ***Please explain how***
Points: up to 3

In accordance with Mayor Jim Brainard's 2005 Executive Order, the City has set a goal for all City-owned vehicles to be alternative fuel or hybrid vehicles whenever possible. This will take several years to achieve due to the functional life of our fleet.

M4. Does your municipality track the energy use of its buildings? Not just cost, but quantities used? ***If so, explain how***
Points: up to 3

Different departments at their different locations track energy usage both by kilowatt hour and cost. The usage is tracked on an excel spreadsheet by meter location and compared on a historical level. Not all departments do this, but the City of Carmel Utilities Department, which has the most building square footage, does keep detailed records as well as the Police Department. Recently, the Utilities Department used this information to calculate the carbon impact of water usage.

M5. Have you tracked the changes in energy consumption from one month over the next, or year over year?
Points: up to 3

No

M6. Are you seeing a reduction in use? *Explain below*
Points: 1

N/A

M7. Have you performed a baseline audit of the amount of fuel used in your fleet?
Have you set goals to reduce the amount of fuel used *If so, what are the goals?*
Points: up to 5

The City of Carmel has not performed a baseline audit of the amount of fuel used in its fleet. The City does have a goal of replacing all City vehicles with alternative fuel vehicles. The No Idle resolution is also part of the City's efforts to reduce the amount of fuel used.

M8. What percentage of your households participates in curbside recycling?
Points: up to 3

Due to the city-wide trash and recycling program and the city ordinance requiring all trash contractors to provide curbside recycling as part of their base service, curbside recycling is available to all single family homes and townhomes in the city. Recent audits indicate that 85% of the residents participate in curbside recycling on any given week.

Bonus: Have you calculated your municipality's carbon footprint? Up to 5 points – Provide link or other documentation for doing so

No

RECENT PROJECTS, PROGRAMS, OR POLICIES (*within the last 12 months*)

List and briefly describe any (**up to three**) projects, programs, or policies that your community has completed or initiated (and have not already been addressed in this survey) within the last 12 months. Each listed project, program, or policy will be evaluated for **3 categories of sustainable benefit (community, environmental, economic),** allowing for a potential total of 20 points in this Section.

Such projects, programs, or policies should be those that your municipality has voluntarily initiated for the betterment of the environment. Do not list regulatory-driven plans, permits, or projects, or programs. Discuss only those projects that you are not required to complete. Briefly describe each project, program, or policy and how it will protect the environment. While it is not required, you may provide up to 10 pages of attachments *to this section* including type-written pages and graphics. Programs, projects, or policies submitted in prior-year survey submittals, unless substantial upgrades/improvements have been made since, do not qualify and should not be submitted.

Intelligent Irrigation Video

The City of Carmel Utilities produced a video about efficient watering the fall of 2012. The title is *Intelligent Irrigation* and if focuses on efficient irrigation practices and smart irrigation technology.

The video was available immediately via the City's website and YouTube.
http://www.carmel.in.gov/index.aspx?page=522#utilitiesvideos
http://www.youtube.com/watch?v=SDRc-UWxeiI

The video started airing this spring on the City's government access cable channel and it is shown several times each week.

Intelligent Irrigation Video

Carmel Green Teen Micro-Grant Program

Created, developed, and administered by teens with the support of the schools and the City, this Carmel nonprofit program empowers young people to take action by funding youth-driven projects that reduce pollution, conserve natural resources, and/or save energy. The goal of the Carmel Green Teen Micro-Grant Program is to challenge area youth to use their skills, creativity and energy to help make Carmel / Clay Township in Indiana a greener, more sustainable community.

In 2009, the makers of Green Works natural cleaners created the Green Heroes program to identify and fund five eco-friendly community projects across the country. Through this program, the local youth group Carmel Area Roots & Shoots was awarded $10,000 to fund its eco-friendly project called the Carmel Green Teen Micro-Grant Program. Initial funding was exhausted in 2011. **The City of Carmel Utilities stepped up to fill in the funding gap, increasing the annual amount in 2013 to $5,000**.

In addition to the funding, the City of Carmel collaborates with Carmel Green Teens by hosting the grant awards ceremonies on City property and publicizing the organization and the good works they do.

Thus far, the **Carmel Green Teen Micro-Grant Program has funded 32 hands-on, youth-driven green projects** to help make Carmel / Clay Township a greener, more sustainable community.. This program is unique in that it is created, developed, and administered by teens for the purpose of motivating and empowering other students within our community. Micro-Grants are reviewed by a committee of volunteers composed of teens from Carmel Area Roots & Shoots, and students and adults from the Carmel area. United Way of Central Indiana's Youth as Resources staff provides organizational support.

For more information visit: www.carmelgreenteen.org

Carmel Green Teen Micro-Grant recipients celebrate with Carmel Mayor Jim Brainard at the check presentation ceremonies in the Carmel City Council Chambers on March 21, 2013. A record number of twelve youth groups were awarded funding for their environmental sustainability projects this year.

Curbside Recycling for Businesses

Starting June of 2013, the City of Carmel along with Republic Waste Services partnered to offer the City trash & recycling program to area businesses and organizations as a way to increase the level of recycling within the City as well as save the organizations money.

Businesses or organizations have the benefit of:

- Biweekly curbside recycling if desired (one or two 96 gallon carts)
- Weekly trash service if desired (one or two 96 gallon carts)
- Low monthly fee of $9.09 for 2013 service included in Carmel Utilities bill.
- Features are identical to the residential program including service day.

Requirements:

- Business/organization must be located within the City limits of Carmel.
- Site visit for pick-up logistics and pre-approval by Republic Services is required.
- Businesses in leased space must obtain prior approval from their landlord regarding cart storage and street curbside pick-up.

The purpose of this program is to encourage recycling for small businesses and organizations. By offering the City residential program on an optional basis for area businesses, it makes curbside recycling affordable where it may not have been otherwise.