

Agenda
Village of Glen Ellyn
Village Board Workshop
Monday, October 11, 2010
7:00 P.M.
Galligan Board Room
Glen Ellyn Civic Center

1. Call to Order
2. Meeting Enhancements – Manager Jones (Pages 2 – 17)
3. Environmental Initiatives – Assistant to the Village Manager Schrader
(Pages 18 – 26)
4. Other items?
5. Adjournment

Board Workshop
10/11/10

(2)



To: President & Village Board

From: Steve Jones, Village Manager

Date: October 6, 2010

Re: **Meeting Enhancements**

Background

In May, the Village President outlined a number of potential enhancements to meetings. Among the topics discussed was the current practice of televising the workshops.

During the discussion, there was no consensus on the whether this practice should continue. The matter was left for further discussion pending the completion of a web survey of residents, and some additional information pertaining to video/audio options from our Multimedia Specialist.

The team has completed the research sought by the Board and we are bringing this matter back for Village Board discussion and direction. A copy of the citizen survey results is attached. We have also included some background on the costs related to changing rooms, or changing the room configuration, if the Board seeks to continue televising the workshops.

Issues

There are really two separate policy issues that relate to this topic. They are:

- a. Should the workshops continue to be televised?
- b. If so, how should the televising occur (room assignment, room configuration, etc.)? This policy issue relates to the feeling that the present configuration of Galligan is not conducive to a productive workshop environment.

If the Village Board chooses to continue the telecast of workshop meetings (with direction to reconfigure the seating arrangement), we will include the necessary funding in the upcoming FY2011-12 budget.

If the Village Board seeks to continue the telecast of workshop meetings with no change to the existing seating arrangement, there is no team action necessary.

If the Village Board seeks to discontinue televising of the workshop meetings, we will need to determine when the decision will need to be implemented

Action Requested

Discussion and direction pertaining to how the Village Board would like to handle future workshops.

Recommendation

The manner in which the Village Board conducts workshop meetings is certainly not something that falls within the purview of the team. However, we do have some opinions on the matter. The pros and cons of televising meetings are attached.

Attachments

Exhibit 1 – Results of resident survey

Exhibit 2 – Background information regarding technology challenges of reconfiguring workshop meetings.

Exhibit 3 – Memo from John Norton regarding media options to solve the challenge.

Supplemental Agenda Information Village of Glen Ellyn

Agenda Item Supplemented by Commentary

- X Pros & Cons
- X Strategic Action Goal
Downtown Strategic Plan Goal
Budget Impact/Return on Investment
- X Process Improvement
Green Initiative
- X Communication Initiative
Safety/Liability/Risk Assessment
Comparable Community Info
Other

Comments:

Pros and cons associated with televising workshop meetings are:

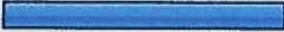
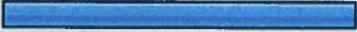
Pros

- Televising meetings provides the public with *convenient* access to the legislative process.
- Televising meetings provides the public with a positive message that the Village has nothing to hide (transparency).
- Currently, and with little effort, residents can become aware of what is happening in their community and become educated citizens. If workshops were not televised, it is unlikely the same level of community awareness would be present since attending a meeting involves more effort.
- Is there really anything else on TV worth watching?

Cons

- Workshops are a forum to foster discussion, debate and frank interaction regarding issues of importance. The presence of TV cameras reduces the level of true interaction and communication. In other words, formality overpowers casual interaction.
- Not every resident is comfortable speaking in a public forum, particularly when it is on television.
- The present configuration of Galligan is not a workshop-friendly environment for the public, elected officials or team members. Creating a more workshop-friendly atmosphere will require capital expenditures.

Televising Village Board Workshops

1. Do you watch the televised Village Board Workshops?			Response Percent	Response Count
Yes			44.4%	12
No (Skip to Question 5)			55.6%	15
			<i>answered question</i>	27
			<i>skipped question</i>	0

2. If you answered yes to question 1, which televised Village Board Workshops do you watch?			Response Percent	Response Count
Second Monday Workshop			0.0%	0
Third Monday Workshop			0.0%	0
Fourth Monday Workshop			0.0%	0
Second and Fourth Monday Workshops			0.0%	0
All			33.3%	4
Dependent upon topics to be discussed			66.7%	8
			<i>answered question</i>	12
			<i>skipped question</i>	15

3. If you answered yes to question 1, how often do you watch the televised Village Board Workshops?

		Response Percent	Response Count
I watch every Village Board Workshop		25.0%	3
I watch at least one Board Workshop a month		33.3%	4
I watch at least one Board Workshop a quarter		0.0%	0
I watch at least one Board Workshop a year		0.0%	0
Dependent upon topics to be discussed		41.7%	5
answered question			12
skipped question			15

4. If you answered yes to question 1, do you watch the televised Village Board Workshops via the Government TV Channel(Channel 6 or 10) or via www.glenellyn.org?

		Response Percent	Response Count
Government TV Channel		100.0%	12
www.glenellyn.org		0.0%	0
Both		0.0%	0
answered question			12
skipped question			15

5. How valuable do you view televising Village Board Workshops to be for the Glen Ellyn community?

answered question 27

skipped question 0

	Response Percent	Response Count
Very valuable	29.6%	8
Valuable	29.6%	8
Neutral	18.5%	5
Limited value	11.1%	3
No value to community	11.1%	3

Additional comments: 3

1. I think it's great that we have the opportunity to watch them. Most of them I have no idea when they're scheduled and come across them randomly. It is a bit frustrating to not be able to voice my opinion through my tv, but I've found out a lot about our little town through watching the meetings. Wed, Jun 16, 2010 11:16 AM
2. Is there a huge cost associated with them? That would change my opinion. Tue, Jun 15, 2010 4:55 PM
3. I only can view on a neighbor's TV because of satellite service. I can't afford the service.

6. Would you like the Village to continue televising its Village Board Workshops?

answered question 27

skipped question 0

	Response Percent	Response Count
Yes	66.7%	18
No	14.8%	4
No opinion	18.5%	5
Additional comments:		8

1. waste of time and money Thu, Jun 17, 2010 3:38 AM

2. If the cost is minimal they should continue to be taped. If there was a specific topic I was interested in I would be inclined to watch b/c this is when the actual decisions are made. Board mtgs. should record the vote with very little discussion. Wed, Jun 16, 2010 11:51 AM

3. nothing was mentioned about the costs. If the costs are prohibitive, perhaps being able to download the transcripts would be cheaper? Wed, Jun 16, 2010 9:26 AM

4. I like that you are asking residents for opinions, but we need facts. What is the cost of this? In both of the surveys so far information that I viewed as being important is missing. Why is the village considering getting rid of the broadcast? Tue, Jun 15, 2010 4:55 PM

5. I may be able to see it at the Glen Ellyn History Center if they are able to record / replay the meetings. Do they? Tue, Jun 15, 2010 3:44 PM

6. I would like to have more info about the workshop agendas and a viewing schedule - could this be emailed to residents? Tue, Jun 15, 2010 3:20 PM

6. Would you like the Village to continue televising its Village Board Workshops?

should not. I know personally of several people who will not appear on camera even if they want to speak about an agenda item.

2010 4:54
PM

8. Assuming there is no material cost to televise. If there is, turn them off.

Mon, Jun 14,
2010 4:12
PM

Broadcasting: Galligan Board Room

The Galligan Board Room broadcasting system is set up very well for the room configuration as is. Unfortunately, the set-up does not provide much flexibility with different room configurations while still producing a high quality broadcast. Please find below a variety of limitations with regard to the equipment and room set-up:

Camera Limitations: The cameras are mounted on the ceiling, two in the front of the room for viewing the dais and the sides of the room, and one mounted behind the dais for viewing the podium, the staff table, and the sides of the room. With this set-up, there is not a realistic, attractive way to shoot down into the center of the room because the ceilings are so high that we would not see much more than the tops of people's heads. I can get shots of the audience from the camera above the dais that work reasonably well, but only because they are facing away from the projection screen, which not all of the board would be able to do (a circular set-up seems to be preferred, therefore some would not be facing the optimal way).

Microphone Limitations: One thing that I don't think anyone wants to see happen is a situation where everyone must "pass the mic." It looks unprofessional, consumes time, and interrupts the flow of discussion. The other option, if we are to move the entire board to another location in the board room for the workshops, is to disconnect the microphones from the dais and then plug mic cables into the receptors, run them to another location and set up mics there. Keep in mind that we would have to purchase these new mics because the ones on the dais will not stand up on their own and have to be mounted the way they currently are within the dais. We do have a few other mics, but they are mismatching and the sound quality is poor with them. Plus, I would hate to see, or try to hide, that many cables running across the room. I will research the purchase cost of additional mics. Unfortunately, it would not only include the cost for more mics, but new equipment in the control room that would be required in order for all of the additional mics to work.

We have had many discussions in the past about different room configurations in Galligan, and in fact do arrange the room differently for different purposes, but for the purpose of broadcasting to the public, which is my main concern, all other options would be downgrade the broadcast quality significantly.

Improving Microphone Consistency

Although I constantly “ride the audio” throughout the meetings, which means I’m adjusting the various volume levels from all of the microphones at all times, there are a few things that speakers can keep in mind to improve the sound quality for our viewers at home, and to some degree for our attending audience:

- All of our microphones are unidirectional, which means that they are designed to pick up sound in the direction in which they are pointed and filter out most sound from the sides and behind. This is good when there are so many speakers so close to each other, but it also means that you must be in the proper position behind the mic when you speak in order to be heard loud and clear. The microphones behind the dais are very easy to move around and adjust, so please ensure that it is pointed directly toward your mouth once you are seated.
- The handheld microphones are designed to be spoken directly into with the person’s mouth very close to the mic.
- The microphones mounted on the dais are a little different and are designed to allow a little more distance between the speaker and the microphone. That being said, the audio level begins to drop off sharply if the speaker is more than 12 inches away from the microphone. If someone leans back in their chair, for instance, and speaks in a normal conversational tone, it becomes difficult to adjust for the difference in volume levels. This also means that there is no need to lean in close and speak directly into these mics like the handheld ones because this can make your voice too loud. 8 to 12 inches is the “sweet spot” for those microphones.
- As far as your voice level, always try to speak as if you’re trying to be heard from someone standing out in the hallway.
- Also keep in mind that all mics are on all the time. When someone is speaking softly and I adjust the audio levels higher to help them be heard, I’m turning up ALL the mics, so any coughing, whispering, even the shuffling of papers becomes very loud.

MEMORANDUM

Date: October 06, 2010

To: Kristen Schrader, Assistant to the Village Manager—ADM

From: John Norton, Multimedia Specialist

Subject: Village Board Workshop Audio/Video/Table Configurations

The following memo provides information on alternative configurations for audio and video with regards to broadcasting Village Board Workshops live.

Audio

The first issue to address when we begin discussing the prospect of alternate room configurations in the Galligan Board Room is audio. Currently, the Village's audio system consists of three wireless microphones and nine microphones hardwired into the dais, in addition to one auxiliary audio port on the wall of the Board Room. These thirteen audio devices fill all of the input ports in the control room. This means that where audio is concerned, there is no free solution; There will be a price attached to any configuration that moves the Village Board away from the dais as an additional microphone system is needed. This is due to the limited receiver ports as well as the fact that the dais' microphone connections cannot be moved.

Should the Village wish to configure the room in an alternate matter, two audio options are available for the Village to purchase: wired microphones or wireless microphones. Either one of these systems is recommended. Pros and cons with each of these systems are listed below.

Wired Microphones

Pros:

- Crisp, clear audio
- Portable and flexible in its uses
- Easy set up
- Speaker built into each unit for amplification
- Record feature for minutes and other purposes
- Less expensive than wireless microphones

Cons:

- Clearly visible wires (see photo)
- "Push to Talk" button would need practice
- Only five "live" mics at any one time

Wireless Microphones

Pros:

- Crisp, clear audio
- No wires; flexible for setup locations in board room
- No "push to talk" buttons
- Mics are live at all times
- Setup and tear down time is greatly shortened

Cons:

- Usage limited to board room or very close proximity
- More expensive than wired option
- Cannot record
- Uses a lot of batteries

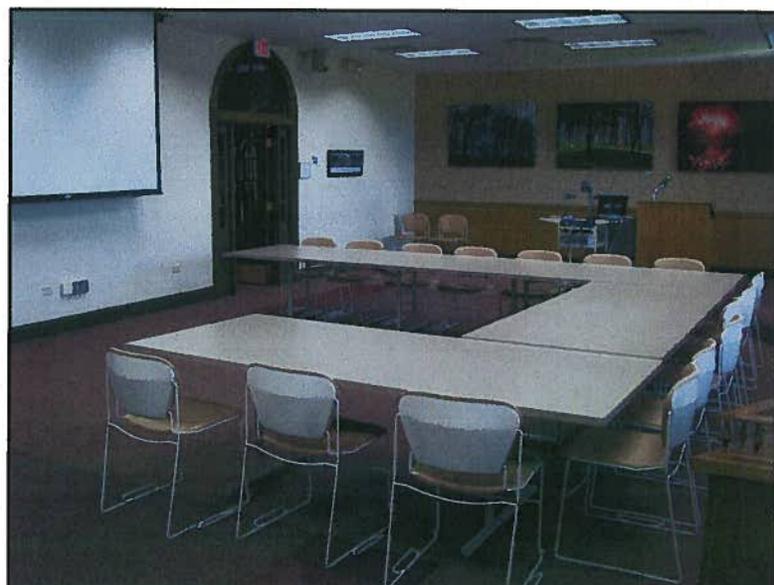


Several quotes from a local audio/video sales and consulting firm, Media Resources, who are familiar with our audio and video system, were obtained for these two options. Media Resources quoted the Village \$7,185 for the purchase of the wired microphone system. This system would include 12 microphones, similar to those pictured here (note: price may be negotiable). The quote for the wireless microphone system is \$10,229 and includes 12 units. These units are similar to the microphones currently in place for the Village Clerk and at the podium in the Board Room. Quotes for both microphone options have been attached to this memo.

Video and Table Arrangements for Broadcasting

When it comes to video, the answer is much simpler: We can work with the current system to record meetings, with no new equipment purchase required. As the cameras in the Board Room are fixed, different table configurations must be used in order to obtain the best video of the Village Board Workshops. Several different configurations of tables were attempted to both try to capture the informal discussion feel while also staying "broadcast friendly."

In my opinion, the table arrangement that best meets the Village's needs is what is presented here: A "J" configuration that is in the center of the room that allows the board and village team to sit at any seat in the setup. The projector can still be viewed by everyone in the room and the camera angles, while not great, will serve the purpose. By not finishing the "U" shape, and leaving a table out, it leaves a place for the freestanding microphone for anyone wanting to address the Village Board. Presented here are photos of the proposed table setup:



Camera Angles with Proposed Table Arrangement

With the table arrangement presented on the previous page, below are the three views that would be captured from the cameras mounted in the Board Room. They would be the *default* views. You can see that every seat is covered, and there is still some flexibility for close ups, alternate views, etc.



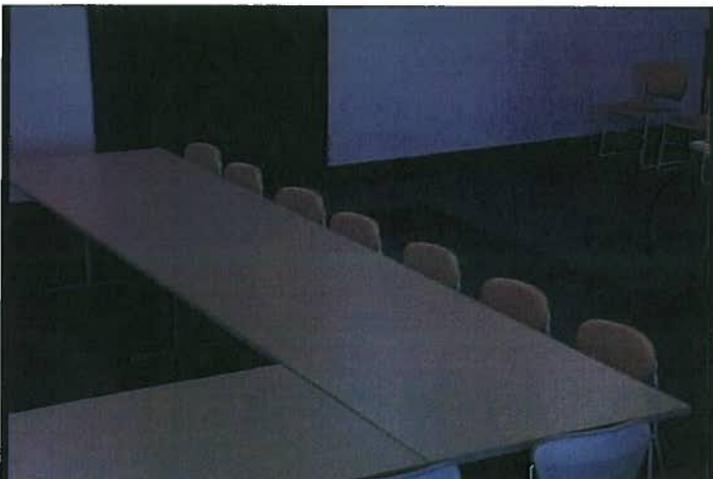
CAMERA 1

Camera 1 covers the six seats along the top end of the table.



CAMERA 2

Camera 2 covers the three seats on the right side of the table and redundant coverage of the two seats on the edge of the top end.



CAMERA 3

Camera 3 would cover the remaining seven seats. This angle is also good to swivel left to view anyone at the microphone that will be set up on the other side of this configuration.

Configuring an Alternate Room for Broadcasting

The possibility of outfitting a smaller meeting room, such as room 301, with its own scaled down broadcast system has been discussed in the past. It has always been a challenge to broadcast from one of these rooms given the size of the rooms and necessary configuration of the tables. In order to reconsider broadcasting from one these rooms, consulting firm Media Resources was contacted. Based on our conversation, it was determined that remote cameras in such close quarters are not an option. However, it would be possible to record and broadcast from one of these rooms with a few changes to audio and video.

For audio, the Village would need to use the wired-microphone option proposed earlier in this report. For video, the best option would be one stationary camera manned by an employee during the meetings who can follow the conversation as it occurs. This setup would permit the Workshop to be broadcast live, however it would also require the expense of an additional employee. This additional employee would need to work in the control room while I work the camera in the workshop room.

Media Resources, Inc.

740 Front Street
 Lisle, IL 60532
 Phone 630-493-1046
 Fax 630-493-1061

Estimate

DATE	Estimate #
9/10/2010	6521

NAME / ADDRESS
Village of Glen Ellyn Attn: John Norton 535 Duane Glen Ellyn, IL 60137 630-547-5208 Fx., IL 630-469-8849

P.O. NO.	TERMS	REP	FOB	PROJECT
	net 15 days	DBM		

DESCRIPTION	QTY	COST	TOTAL
Bosch CCS-CUB, Master control unit	1	1,113.84	1,113.84
Bosch LBB3331/00, Master Delegate unit.	1	429.12	429.12
Bosch LBB3330/00, Standard delgate unit	11	352.80	3,880.80
Bosch LBB3312/10, Case to Hold 6 delegates and master	1	367.20	367.20
Custome Wall plate for connections to master rack	1	87.75	87.75
Extron 60-572-01, MVC 121 Mic-Line mixer.	1	253.50	253.50
Extron 60-440-01 MDA 3A three output stereo audio mini distribution amplifier	1	136.50	136.50
Cabling and Materials for installation	1	50.75	50.75
Installation Labor	1	780.00	780.00
Delivery charges	1	85.54	85.54
<p>This estimate includes 12 total delegate stations (1 being a master) and 1 Master control unit. The quote also includes (2) portable cases to store the units. There is an aux ouput from the master to support the existing sound system. MRI will install a plate to plug the aux connection into which would then feed the necessary Mixer and DA.</p>			
TOTAL			\$7,185.00

Acceptance Signature _____

Media Resources, Inc.

740 Front Street
 Lisle, IL 60532
 Phone 630-493-1046
 Fax 630-493-1061

Estimate

DATE	Estimate #
9/30/2010	6556

NAME / ADDRESS
Village of Glen Ellyn Attn: John Norton 535 Duane Glen Ellyn, IL 60137 630-547-5208 Fx., IL 630-469-8849

P.O. NO.	TERMS	REP	FOB	PROJECT
	net 15 days	DBM		

DESCRIPTION	QTY	COST	TOTAL
Avlex ACT-707D, 1 Rack Dual Diversity Receiver. Color LED.	6	446.875	2,681.25
Avlex ACT-707HM, Supercardioid Handheld microphone.	12	250.00	3,000.00
Avlex AD-707, Antenna Divider	2	312.50	625.00
Avlex AT-70, UHF extension Antenna with mounting bracket	1	112.50	112.50
Avlex ACT-707DVU, USB interface for PC control and linking.	1	106.25	106.25
Shure SCM810 automatic mic mixer	1	1,260.00	1,260.00
Shure SCM410 four channel automatic mixer	1	700.80	700.80
Shure DFR22 2x2 audio processor with Digital Feedback reduction	1	576.00	576.00
Mid Atl PD915RC-20, 9 outlet, 1 on front, 20 foot power cord	1	86.80	86.80
Cabling and Materials for installation	1	114.75	114.75
Installation Labor	1	910.00	910.00
Delivery charges	1	55.65	55.65
-Take out old VHF wireless microphone units. Install new receivers and distribution unit in main rack. Pull coax cable for antenna into room. install antena's in the ceiling.			
		TOTAL	\$10,229.00

Acceptance Signature _____

Board Workshop

10/11/10

③

To: Steve Jones, Village Manager

From: Kristen Schrader, Assistant to the Village Manager - ADM



Date: October 6, 2010

Re: Glen Ellyn Environmental Initiatives



Background

The Village of Glen Ellyn has long been a leader in fostering environmental stewardship and incorporating green principles into the community and the municipal workplace. We want to take this opportunity to inform you of several relevant environmental accomplishments that the Village has recently undertaken that continue to demonstrate our environmental awareness. These initiatives include becoming an active member of Clean Air Counts and participating with the U.S. Environmental Protection Agency on the Energy Star Portfolio Manager Program. Both of these activities are detailed below.

Clean Air Counts

Clean Air Counts (CAC) is an innovative, non-regulatory approach to reducing smog-causing emissions in the Chicago metropolitan region to achieve compliance with standards of the federal Clean Air Act. CAC seeks to reduce ozone-causing emissions, thereby improving air quality and enabling economic development. Joining CAC means organizations are making a commitment to undertake voluntary efforts to reduce smog in the Chicago region. CAC adopters assess opportunities to reduce emissions and conserve energy in areas related to transportation, energy, operations and maintenance, and development.

Glen Ellyn took the CAC pledge in July of 2010 when Village President Pfefferman sent a letter to CAC indicating the Village's intent to become active in the program. When an organization becomes a member of CAC, the organization is placed into a participation level based upon its efforts to reduce emissions. Participation levels include bronze, silver, gold and platinum, with the environmental emission reducing requirements becoming more stringent with each level. When the Village joined CAC in July, Glen Ellyn was placed at the silver participation level. The Village was able to bypass the bronze level when it joined due to the high number of environmental initiatives the Village is already involved with. These environmental initiatives are detailed in the attached inventory.

Since the Village became active, members of the Village Board and Team have attended Clean Air Counts meetings and have begun to review current environmental initiatives for improvements, as well as look towards future environmental initiatives to expand upon our participation in the program and reach higher participation levels. Several initiatives the Village is currently taking a look at to improve upon its participation level include contributing to a variety of outreach efforts to promote clean air initiatives among Village residents, businesses

and institutions; working towards a low Volatile Organic Compound (VOC) cleaning program in all Village facilities; and creating no idling zones within the Village. We will keep you informed on the possibility of implementing these potential initiatives, as well as new environmental activities and programs for CAC that are brought forward.

Energy Star & the Portfolio Manager Program

Energy Star is a voluntary program that provides solutions for reducing energy consumption, as well as providing the Energy Star label for energy efficient appliances and buildings. The Energy Star label for energy efficient buildings is done by a 1-100 performance score compared to similar buildings nationally. A rating of 75 or above signifies that the building is performing better than 75% of comparable buildings nationally, and qualifies for an Energy Star label and national recognition. In order to determine a building's energy efficiency performance score, Energy Star provides a free online benchmarking tool called Portfolio Manager. Portfolio Manager is a tool for measuring and tracking energy performance of a building or portfolio of buildings. It provides a baseline for building energy usage, helping organizations track increases or decreases in energy usage and allowing organizations to compare the energy usage of a building to similar buildings.

The Village has worked with the U.S. EPA over the last year to collect, input and analyze the Village's energy data with this online tool. Energy data for all municipal buildings was analyzed, including the Civic Center, Reno Center, Fire Stations #1 and #2, History Center, Stacy's Tavern Museum and the Stonehaus. Based upon the data analysis, it was determined that the Reno Public Works Center is eligible for an Energy Star Plaque with a rating of 80 and the Civic Center is close to being eligible with a rating of 65. The Energy Star rating program does not have ratings for all building types due to a lack of information available. Unfortunately, the other Village buildings analyzed fall into this category. It should be noted however that if a building type is not eligible for a rating, it can still be benchmarked and compared to like buildings (but cannot receive an Energy Star Plaque).

The Village Team was very pleased to hear that our current environmental efforts have led to the eligibility of an Energy Star plaque for the Reno Center. Members of the Administration Department and Public Works Department plan to work together in the coming months to apply for (and hopefully receive!) the plaque for the Reno Center. In addition, while the Civic Center is not currently eligible for a plaque, the EPA has acknowledged that the Village may be able to reach a performance rating of 75 or greater with inexpensive, quick improvements to the Civic Center and its equipment. Several of the improvements our Facilities Maintenance Division is currently looking into (or completed) since the analysis include the installation of boiler controls and additional light sensors, the purchase of smart strips and NEMA efficiency motors, and many other improvements. When these improvements are in place, the Village Team is hopeful that the Civic Center will reach a rating of 75, and be eligible for a plaque. With regard to all Village buildings, the Village Team plans to continue to monitor the energy usage of buildings with the Energy Star Portfolio Manager Program.

Action Requested

This is information intended to update the community on these important environmental accomplishments. If the Village Board has any additional goals for this issue, we would appreciate your input at this time.

Attachments

- Environmental Initiatives Inventory – 2009

**Supplemental Agenda Information
Village of Glen Ellyn**

Agenda Item Supplemented by Commentary

- Pros & Cons
- Strategic Action Goal
- Downtown Strategic Plan Goal
- X Budget Impact/Return on Investment**
- Process Improvement
- X Green Initiative**
- Communication Initiative
- Safety/Liability/Risk Assessment
- Comparable Community Info
- Other

Glen Ellyn Green Initiatives Inventory

Community-Wide Activities:

- Weekly curbside recycling program
- Seasonal yard waste, branch and brush collection program.
- Annual Recycling Extravaganza event, in addition to the 2009 electronics recycling
- Annual Environmental Newsletter sent to all Glen Ellyn residents
- Environmental Commission that provides environmental stewardship and education
- Annual Joe Wark Environmental Award to recognize environmental awareness in building design and construction

Vehicles and Fleet Management:

- Use of diesel vehicles that run on biodiesel fuel.
- Increased use of hybrid vehicles (currently four in operation).
- Recycle and reuse long-life engine coolant.
- Recycle used engine oil and solvents.
- Recover, recycle, and reuse R134A refrigerant.
- Drain and dispose of used filters to eliminate oil leeching into landfills.
- Increased use of alternative fuel vehicles (E85).

Office and Village Facilities

Heating & Air Conditioning:

- Reduced electrical energy usage through high-efficiency air conditioning and dehumidification systems.
- Utilization of thermostats with digital calendars to allow adjustments when buildings are not in use.
- Utilization of external duct insulation for smoother airflow and lower electrical usage.

Lighting Design:

- Reduction in the required number of light fixtures through installation of more modern lighting, and utilization of whiter light product.
- Replacement of incandescent bulbs with CFLs.
- Installation of several dozen switches to automatically activate with a motion sensor, where appropriate.
- Installation of dimmer devices that reduce lighting output of the fixture proportionally to the amount of sunlight sensed in the space.

Refuse and Recycling Practices:

- Recycling program in place for aluminum, glass, plastic and paper used in the workplace.
- Recycling program in place for ink jet and laser jet print cartridges.

- Encouraging the use of double-sided copying to save paper.
- Movement towards providing digital handouts and forms available on the website to avoid paper usage.
- Encouraging the use of email correspondence to avoid paper usage.
- Movement away from styrofoam cups to paper cups.

Facility Maintenance Practices:

- Incorporation of green chemicals and cleaning products into routine maintenance supplies.
- Incorporation of green cleaning equipment (vacuums, mopping systems, carpet machines) into maintenance inventory.
- Incorporation of energy saving design elements in the Civic Center Gymnasium.

Planning and Development Department

- Requirement of tree protection plan during construction.
- Watering requirement during demolition to reduce dust and airborne debris.
- Silt fencing requirement during construction to mitigate erosion.
- Adoption of 2006 ICC International Energy Conservation Code.
- Compliance with the DuPage County Stormwater Ordinance and Best Management Practices.
- Encourage use of stormwater holding tanks and drywells.
- Requirement of use of high efficiency furnaces.
- Encourages the use of manufactured materials in lieu of wood, earth cooling systems and on-demand boilers.

Public Works Department: Maintenance & Operations

- Use of traffic safety arrow boards and radar trailers with solar power.
- Provide & maintain commuter-parking facilities to encourage use of public transportation.
- Provide & maintain bike racks to encourage reduction of vehicle use.
- Conversion of the majority of traffic signals to LED lighting.
- Automated spreading of road salt and anti-ice solutions, reducing the negative impact of chloride entering the Village's stormwater.
- Recycling of wood into usable mulch.
- Recycling of scrap metals, tires and other materials.
- Designation of Tree City USA for 25 consecutive years.

Comprehensive forestry management program:

- Systematic tree maintenance and new plantings.
- Community education regarding tree care.
- Diversified planting program.
- Tree preservation plans required for building permits & large projects.
- Registration of tree care companies required.

Recreation Department and Village Links:

Habitat & Native Wildlife Development:

- Maintenance of bird feeders and selection of native plants as natural food sources for songbirds.
- Conversion of existing areas from non-native invasive plants to native plants.
- Creation of brush piles to provide habitat for small mammals.
- More than 50 nest boxes maintained for native cavity nesting birds including Bluebirds, Tree Swallows, Black-capped Chickadees, Wrens and Wood Ducks.
- More than 95% of newly planted trees and shrubs are indigenous native plants.

Environmental Protection:

- Maintenance of pond buffer zones to reduce fertilizer/pesticide runoff.
- Spoon-feeding of fertilizers - a slow release variety to prevent excessive nutrient loading.
- Limited use of phosphorous fertilizer dependent upon soil conditions.
- Protection of land banks from erosion via riprap and fabric.
- Control of aquatic weed growth with biological controls and Amur carp.
- Maintenance of irrigation pumps and sprinklers to ensure efficient use of water.
- Reduction of noise pollution near residences through the use of an electric mower for daily early morning greens mowing.
- Recycled storm runoff water is the primary irrigation source.
- Recycling of Food Service cooking oil.
- Recycling of landscape debris and use of it on Recreation Department property. No landscape waste leaves the property.

Integrated Pest Management:

- Golf course turf grass varieties are maintained at optimal health to avoid unnecessary chemical inputs.
- Insects, weeds and diseases are not treated unless they exceed predetermined economic thresholds.
- Pesticides are chosen based on their effectiveness and their least impact on the environment.

Public Outreach & Education:

- Sponsor of the Glen Ellyn Backyard Wildlife Program to inform interested residents of departmental environmental activities and provide advice regarding individualized projects.
- Participation in the North American Bird Watching Open.
- Provision of Environmental Speakers Bureau.
- The Village Links was the first public golf course in the world to be certified as a Wildlife Sanctuary by Audubon International.