



Agenda
Village of Glen Ellyn
Special Workshop Meeting
Monday, September 19, 2016
6:30 PM
Glen Ellyn Civic Center, Room 301

Village Board Workshop Procedures Statement

Visitors are most welcome to attend all meetings of the Village Board and can find copies of the Agenda on their chairs or online at www.glenellyn.org prior to the meeting. Any individual with a disability requiring a reasonable accommodation in order to participate in a meeting should contact the Village of Glen Ellyn ADA Coordinator, 630-469-5000, at least five (5) business days in advance of the next scheduled meeting. All matters on the Agenda may be discussed, amended, and acted upon.

- A. Call to Order**
- B. Roll Call**
- C. Pledge of Allegiance**
- D. Motion to conduct an Executive Session for the purpose of discussing pending litigation, returning to open session thereafter. (Trustee Clark)**
- E. Audience Participation**
 - 1. Open: Members of the public are welcome to speak to any item *not* specifically listed on tonight's agenda for up to three minutes. For those items which are on tonight's agenda, the public will have the opportunity to comment at the time the item is discussed. In either case, please complete the Audience Participation form and turn it in to the Village Clerk. It is requested that, if possible, one spokesman for a group be appointed to present the views of the entire group. Speakers who are recognized are requested to step to a microphone and state their name, address and the group they are representing prior to addressing the Village Board.
- F. Five Year Forecast and Background: (Presented by Finance Director Christina Coyle)**
 - 1. Finance Director Christina Coyle will lead the discussion regarding the Village's Five Year Forecast.
- G. Indoor and Outdoor Live Entertainment at the Village Links/Reserve 22: (Presented by Planning and Development Director Staci Hulseberg)**
 - 1. Planning and Development Director Staci Hulseberg will review the Village Links/Reserve 22 special use permit for indoor and outdoor live entertainment.
- H. Park Boulevard/Main Street Projects Engineering Updates: (Presented by Senior Engineer Rich Daubert)**
 - 1. Senior Engineer Rich Daubert will discuss the Park Boulevard/Main Street Projects additional Phase I engineering expenses & Phase II engineering services.

I. Special Event Policy & Commercial Filming Permits: (Presented by Assistant Village Manager Al Stonitsch)

1. Assistant Village Manager Al Stonitsch and Administrative Intern Brendon Mendoza will provide information regarding the Special Event Policy update and Commercial Filming Permits.

J. Environmental Commission Update: (Presented by Assistant Village Manager Al Stonitsch and Administrative Intern Brendon Mendoza)

1. DuPage County Cool DuPage Initiative.
2. Proposed Lambert Lake Stewardship Program.
3. Environmental Commission 2017 funding request.

K. Other Items

L. Adjournment



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 09/19/16 06:30 PM
Department: Finance
Department Head: Christina Coyle
Category: Report
Prepared By: Christina Coyle

SCHEDULED

AGENDA ITEM (ID # 2418)

DOC ID: 2418

**Finance Director Christina Coyle will lead the discussion regarding
the Village's Five Year Forecast.**

Please find the Five Year Forecast attached to this memo.

ATTACHMENTS:

- Five Year Forecast 2016 2016-09-14 (PDF)



Five Year Forecast 2016

Goals of Five Year Forecast

- ∞ Understand long-term financial trends in revenues and expenditures/expenses.
- ∞ Identify future imbalances (deficits).
- ∞ Identify potential areas where programs can be implemented now to avoid future deficits.
- ∞ Understand how this forecast aligns with past forecasts.
- ∞ Compare past forecasts with actual results.

Facts on the Five Year Forecast

- ∞ Developed annually as a tool for the budget process.
- ∞ Forecast is a model to project future activity and is not a prediction of what will happen.
- ∞ Each year's experience will vary.
 - ~ *The goal is that annual budgets will be balanced.*
 - ~ *Each year's actual results will vary.*
- ∞ Historical results includes FY2012, FY2013, FY2014, FY2015 and Budget 2016. The Short Fiscal Year (May 1, 2014-December 31, 2014) is excluded as it was an 8-month period.

1. General Fund
2. Water & Sewer Fund
3. Capital Projects Fund
4. Long Term Liabilities

Content of Five Year Forecast

The Five Year Forecast is divided into four main areas. The first two areas are the largest operating funds of the Village, the General Fund and the Water & Sewer Fund. The last two areas focus on the Village's infrastructure and long term liabilities, including debt and pension liabilities.



GENERAL FUND

Building the General Fund Forecast: Key Assumptions - Revenues

	FY16 Budget (thousands)	Average Historical Growth (2012-2016)	Projected Annual Growth (2017-2021)
Property Taxes	\$3,464	6%	2.5% ¹
Sales Tax	\$3,399	1%	3.0% ²
Home Rule Sales Tax	\$1,980	3%	3.0% ³
Income Tax	\$2,748	6%	3.0% ⁴
Other Revenues (combined)	\$5,683	3%	3.0% ⁵

Footnotes:

1. Assumes 1.5% growth in CPI and 1% growth in new construction/annexations. Historical growth rates do not include property taxes for Fire Service Areas as those were moved to the Fire Services Fund in SY2014. Historical growth is due to primarily new growth.
2. Sales tax increased 4% in 2014 and 6% in 2015 as the economy rebounds. 3% is a conservative estimate for future performance. A \$25,000 reduction was also factored into 2017 to account for Mariano's opening in Lombard.
3. Home Rule Sales Tax increased 3% in 2014 and 8% in 2015 as the economy rebounds. 3% is a conservative estimate.
4. Income tax lists 3% as the projected growth rate as a conservative figure.
5. Other revenues includes all other revenues of the general fund. Ambulance fees have been excluded in the historical growth rate as a change in contract model makes historical growth rates incomparable to projected future growth.

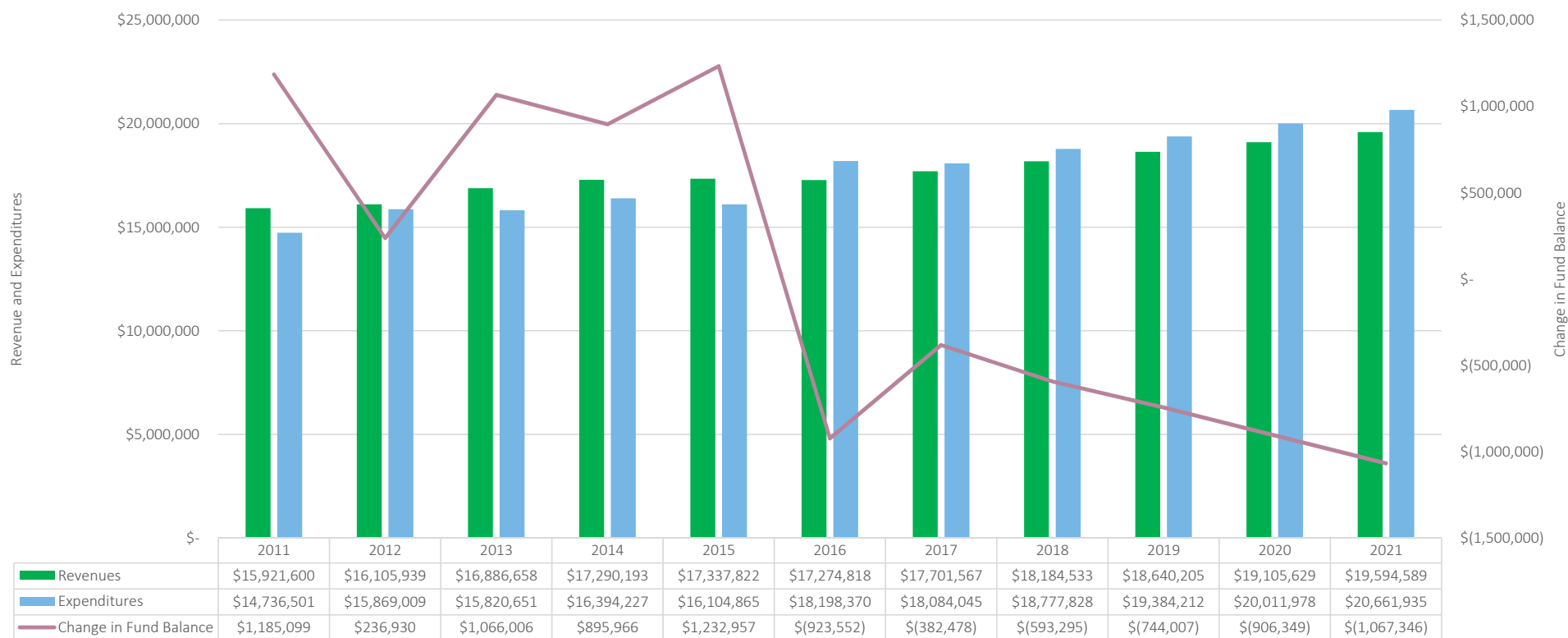
Building the General Fund Forecast: Key Assumptions - Expenditures

	FY16 Budget (thousands)	Average Historical Growth (2012- 2016)	Projected Annual Growth (2017-2021)
Salaries – public safety	\$3,726	4%	4.0% ¹
Salaries – all other	\$4,591	5%	2.0% ²
Pension – public safety	\$1,292	7%	5.0% - 12.0% ³
Pension – all other	\$403	3%	2.0% ⁴
Health Insurance	\$962	3%	4.0% ⁵
Contractual Services	\$3,236	2%	3.0% ⁶
Commodities	\$226	4%	3.0% ⁶
Capital Outlay	\$163	14%	5.0% ⁷
Transfers	\$1,835	1%	3.0% ²

Footnotes:

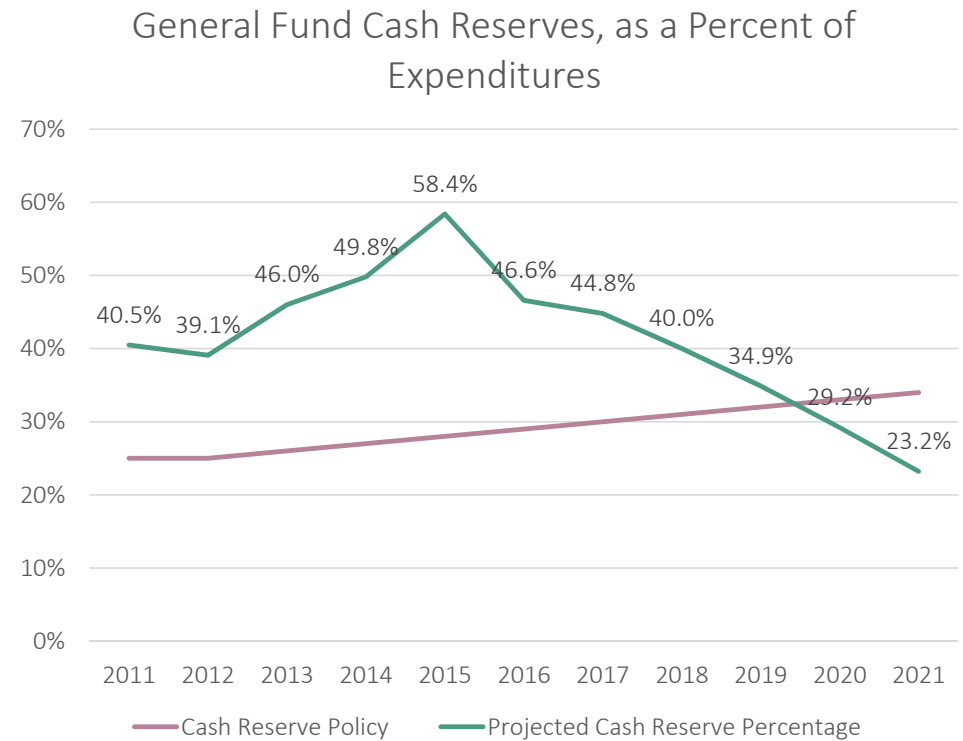
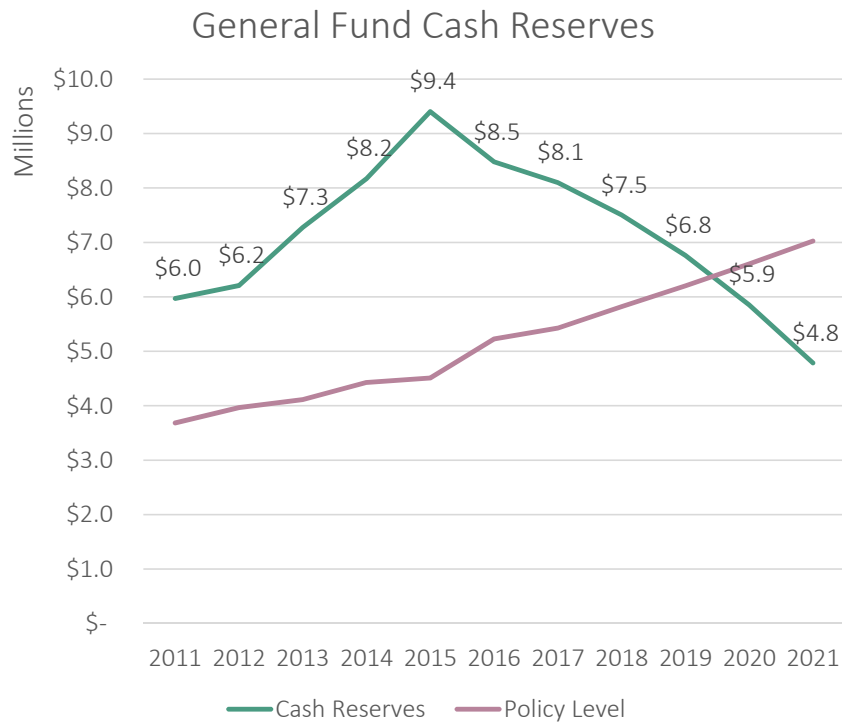
1. Based upon current contract structure. Also includes a factor for vacancies.
2. Average increase has ranged from 2-3% over the last several years. Historical growth includes positions added with Board approval. Assumed 3% increase with a 1% reduction for vacancies. Transfers are closely tied to changes in personnel expenses as other funds reimburse the general fund.
3. Projects continued movement downward of investment return assumption in 2017 and 2018. Afterwards a 5% assumption is used.
4. IMRF pension costs are stabilizing and are expected to trend closely to salary increases in the future.
5. The Village's insurance pool has helped to beat the market increases for health insurance.
6. Commodities and Contractual Services are anticipated to increase at a conservative 3%.
7. Capital replacement was deferred during the economic downturn; recent purchases have been meeting deferred needs.

Annual General Fund Forecast



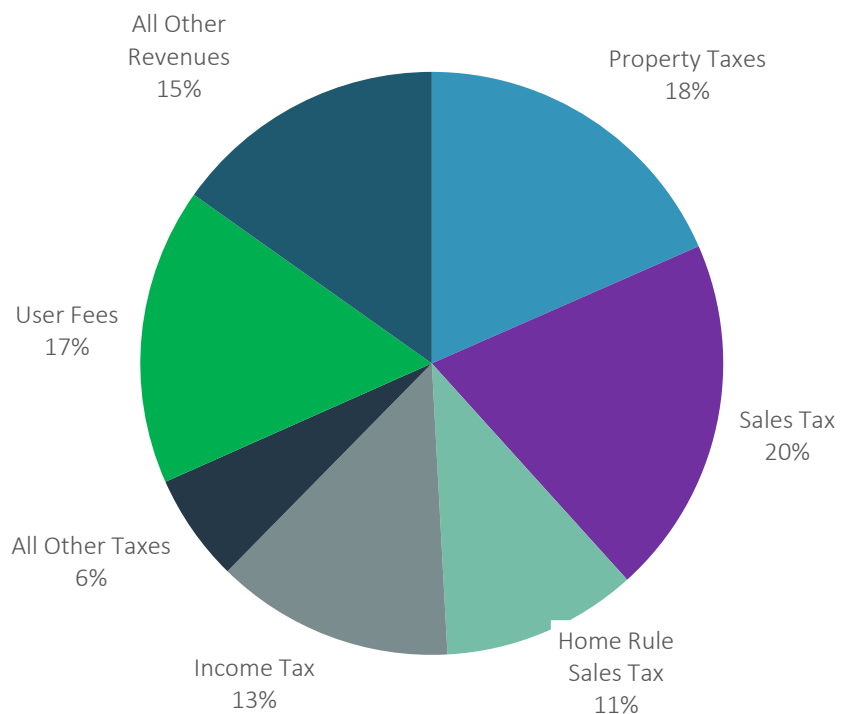
Revenues are forecast to grow at approximately 3% per year while expenditures grow at 4%, which would decrease the General Fund's fund balance by \$3.7 million over the next 5 years.

General Fund Balance Projections

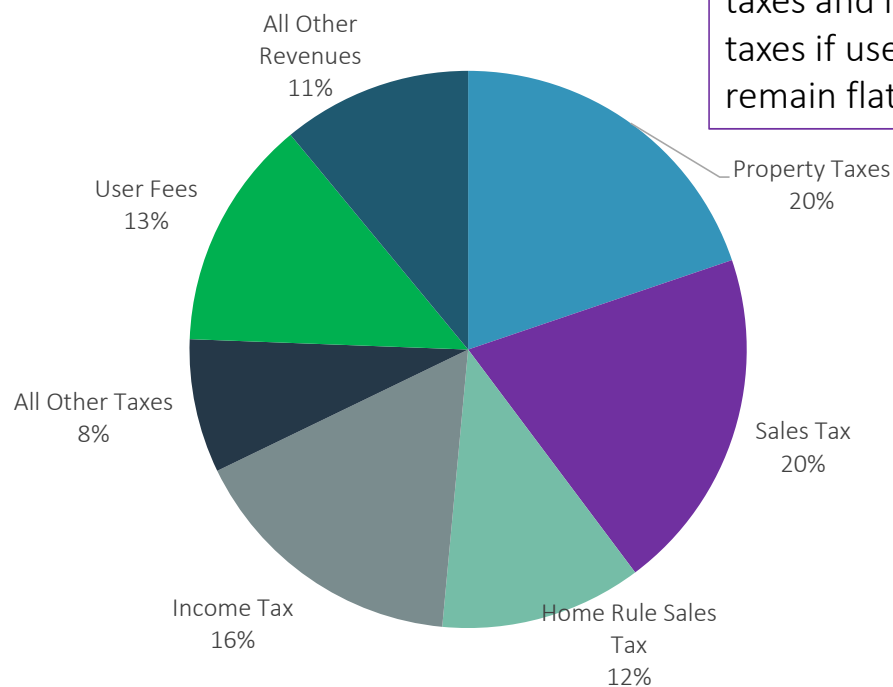


Composition of General Fund Revenues

2011 ACTUAL



2021 PROJECTION

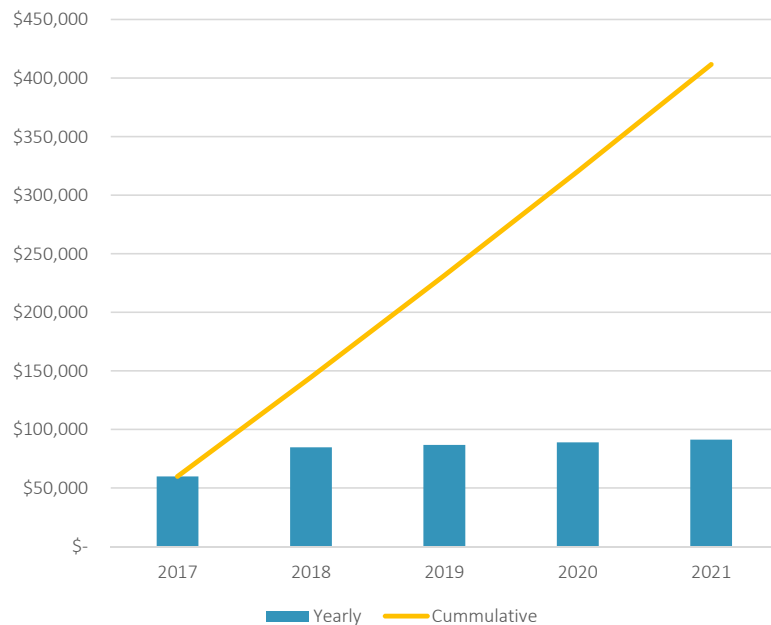


Challenges in Revenue Streams

Several challenges and decision points are on the horizon regarding General Fund Revenues:

- ∞ The Village relies heavily upon performance of sales tax, home rule sales tax, and income tax to provide for known increases in costs. The Village has little direct control over these revenues that are highly influenced by the economy.
- ∞ Legislation in Springfield may limit the Village's ability to increase the property tax levy.
- ∞ It is still unknown if any reduction will be made to the income tax by the State.
- ∞ User fees have not been increased which puts pressure on taxes to increase or perform well to maintain revenue levels.

What would a property tax freeze cost the Village over 5 years?



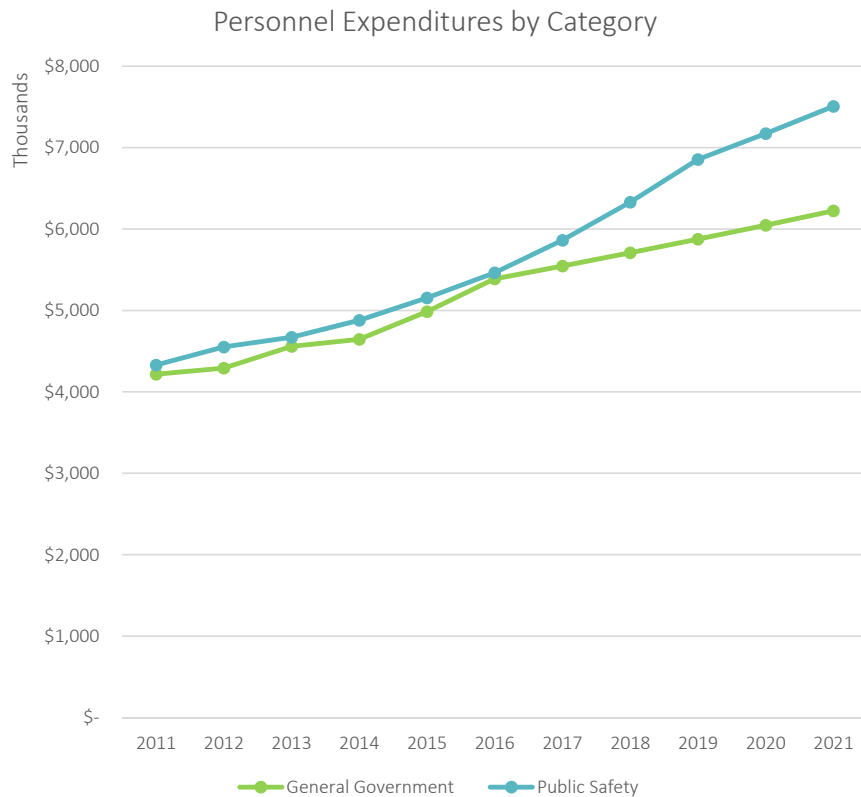
- ∞ The Village is a home rule community that is not legally bound by tax caps.
- ∞ However, the Village traditionally holds itself to the tax cap philosophy, which means the Village increases its levy for new growth and CPI only. This philosophy favors gradual increases over time rather than creating spikes in property tax rates.
- ∞ In 2014, the Village did not increase the levy and in 2015 the Village only increased the levy for new growth (no CPI factor).
- ∞ The Village levies one general operating levy for the General Fund. The Capital levy goes to the Capital Projects Fund, which will be addressed in subsequent slides.
- ∞ Legislation in Springfield may limit the Village's ability to increase the levy.
- ∞ This slide shows the yearly and cumulative impact if the Village could not increase its tax levy.
- ∞ Over 5 years, the Village would forego \$411,000 of revenue in the General Fund that would have to be made up from other revenue sources or through reductions in service.

General Fund Expenditures by Type



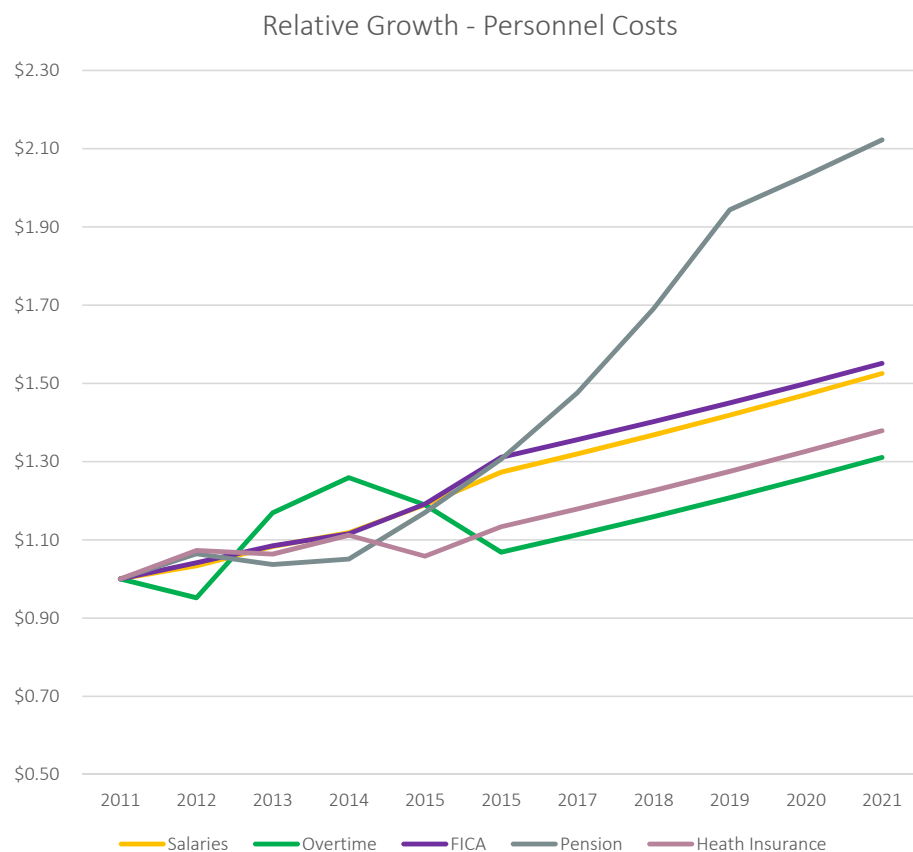
- ∞ Personnel expenditures comprise approximately 68% of General Fund expenditures.
- ∞ The Village functions accounted for in the General Fund are highly service oriented; therefore, it is expected that personnel expenditures would be the main expenditure type.
- ∞ Personnel expenditures grow at a faster rate than capital or other operating costs.

Personnel Expenditures by Category



- ∞ Public safety personnel costs are projected to grow at a faster rate (5.6%) than general government (2.1%).
- ∞ Police pension costs are also forecast to grow at a higher rate (12-18% in next two years then 5% thereafter) than municipal pension costs (2%).
- ∞ Forecasts reducing the investment return assumption for the police pension to 6.5% in 2017 and 6.25% in 2018.

Personnel Expenditures by Type – Relative Growth



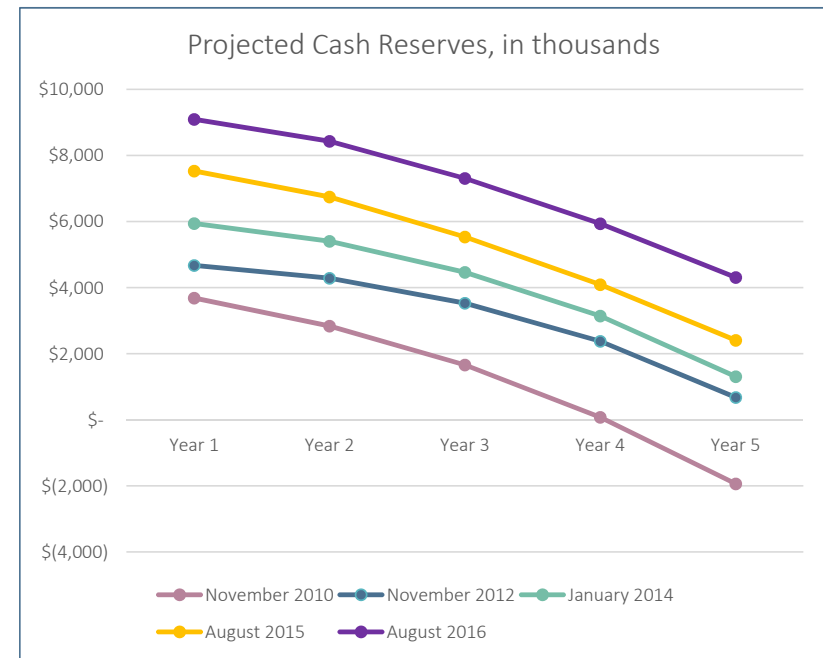
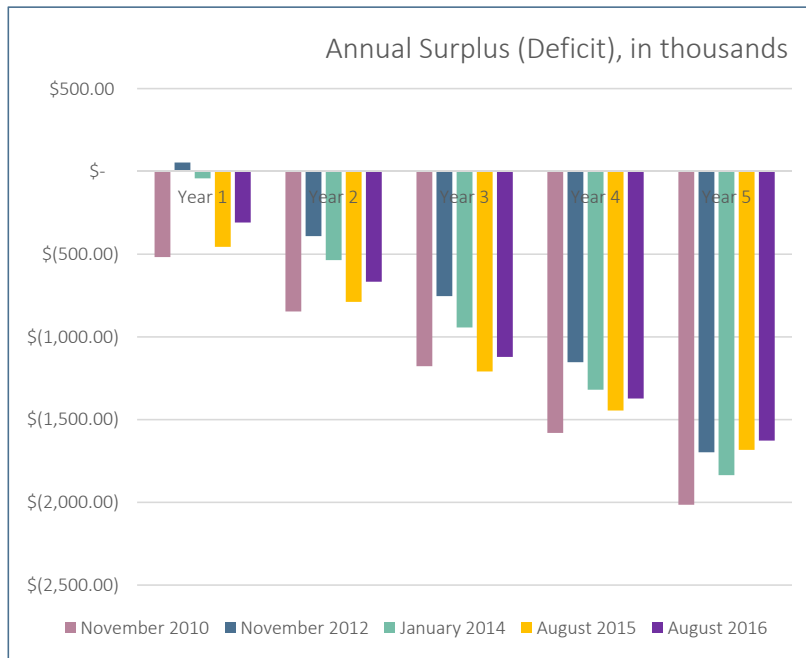
- ∞ Chart at left portrays the growth rate of personnel expenditures.
- ∞ Pension costs grow at the highest rate.
- ∞ The Village has been fortunate through its health insurance pool to mitigate health insurance cost increases seen in the marketplace. The next hurdle is to avoid Cadillac taxes in 2020.

Health Insurance

- ∞ The Village is a member of a health insurance risk-sharing pool.
- ∞ Health insurance costs have increased by 3% over the past 5 years, beating the market place trend.
- ∞ Our pool administrators project 4% annual increases, assuming avoidance of the Cadillac Tax.
- ∞ The chart at right evaluates the difference in cost between a 4% trend and a 10% trend. As can be seen, it is important to our financial future to control our healthcare costs to the best of our abilities.

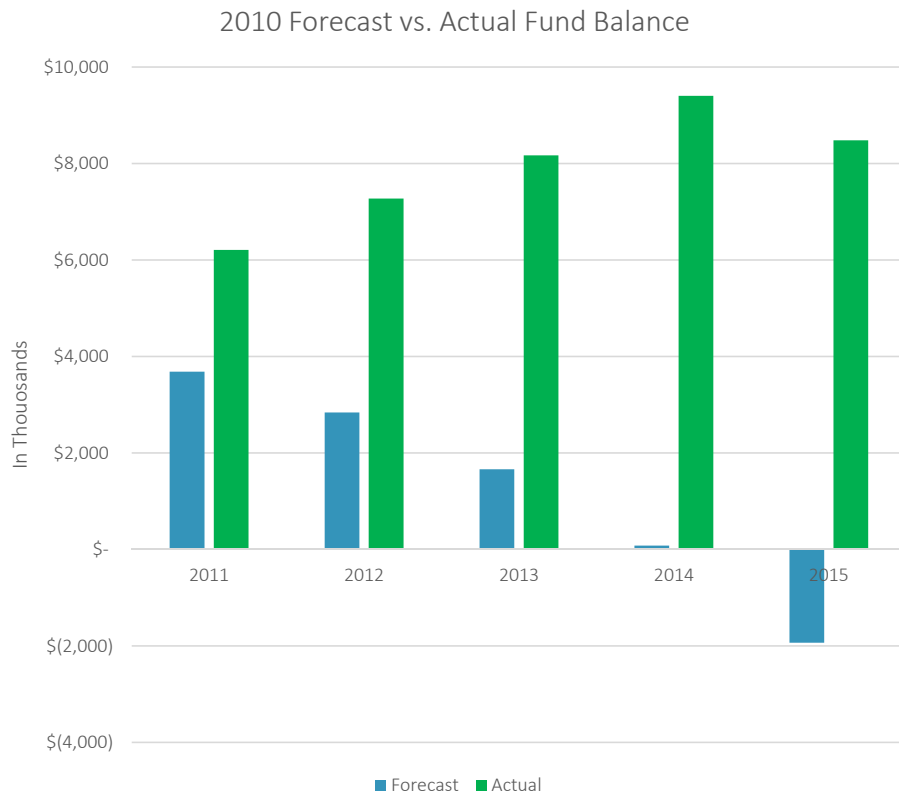
	4% Growth Rate	10% Growth Rate	Difference
2015 Cost	\$962,000	\$962,000	\$0
2021 Cost	\$1,170,000	\$1,549,300	\$379,300
Cumulative Cost over 5 Year Forecast	\$5,418,900	\$6,460,400	\$1,041,500

How does this General Fund Forecast Compare?



- ∞ This year's forecast shows improvement over the prior year.
- ∞ Similar challenges in the later years of declining fund balances.
- ∞ Better starting cash position has improved the 5 year outlook.
- ∞ The Cash Reserves graph demonstrates that each year the Village has been successful at meeting some of the challenges identified in the Five Year Forecast.

Forecast Versus Actual – November 2010 Forecast



∞ 2010 is the first forecast with completed actual results.

∞ Actual results fared better than forecast.

∞ *Sales, Home Rule Sales, and Income tax have far outperformed expectations.*

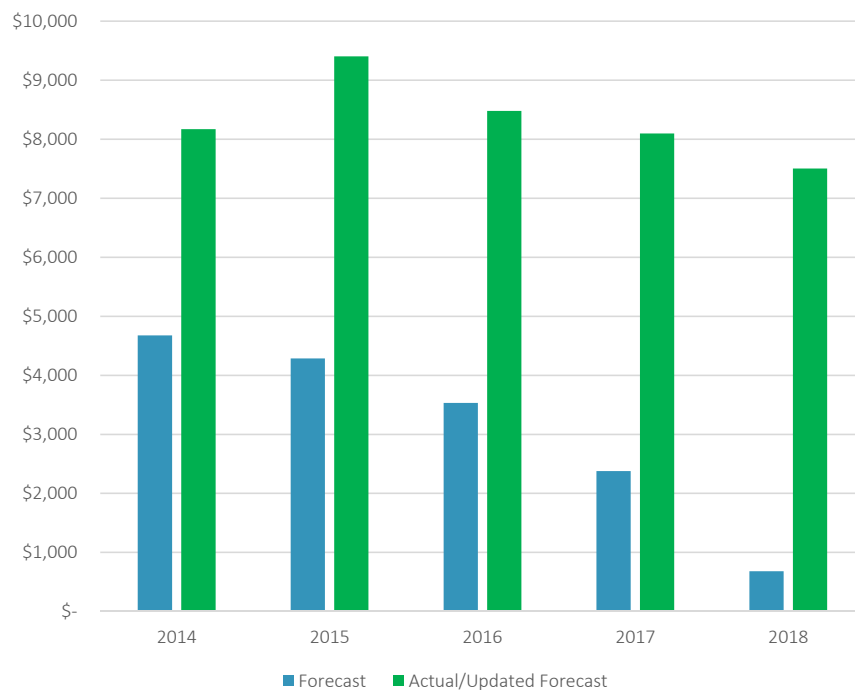
∞ *Lower salary increases than anticipated.*

∞ *Lower healthcare cost increases than anticipated.*

∞ *Annual balanced budgets and good fiscal management have allowed cash reserves to increase.*

Forecast Versus Actual/Current Forecast – November 2012 Forecast

2012 Forecast vs. Actual/Current Forecast Fund Balance,
in thousands



∞ 2014 and 2015 are actual results and 2016-2018 are updated forecast balances.

∞ Actual results fared better than forecast.

∞ *Sales, Home Rule Sales, and Income tax have far outperformed expectations.*

∞ *Lower salary increases than anticipated.*

∞ *Lower healthcare cost increases than anticipated.*

∞ *Annual balanced budgets and good fiscal management have allowed cash reserves to increase.*

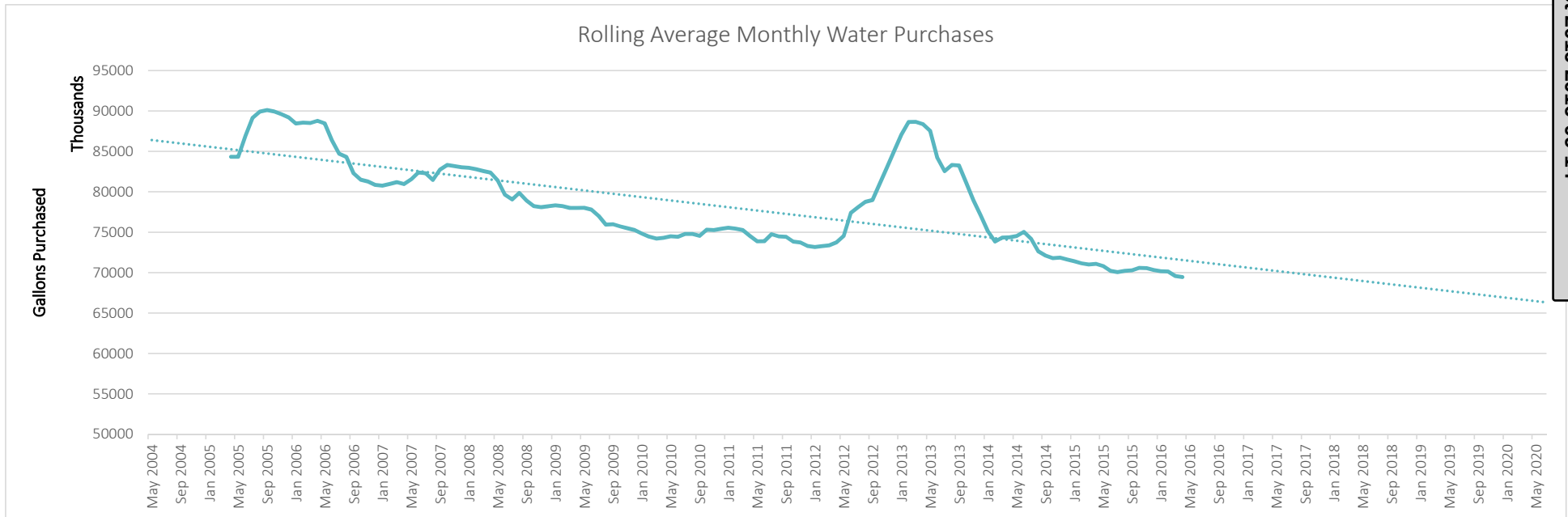
Highlights of General Fund 5-Year Forecast

- ∞ Personnel costs comprise 68% of General Fund expenditures. It will be necessary for the Village to be focused on controlling and meeting the challenges health care and pension costs.
- ∞ The budget deficit in 2017 is largely due to the increase in sworn pension costs associated with reducing the interest rate assumption.
- ∞ While the state budget is uncertain, it could impact the Village negatively.
- ∞ The Village has little direct control over three revenue sources (sales tax, home rule sales tax, and income tax) which are directly impacted by the economy.
- ∞ The Village has made very few changes to user fee scales in the past several years.
- ∞ The Village's AAA bond rating that it received recently cited strong reserve balances as a key reason for the rating. It is important to maintain the healthy reserve levels to maintain the AAA rating.



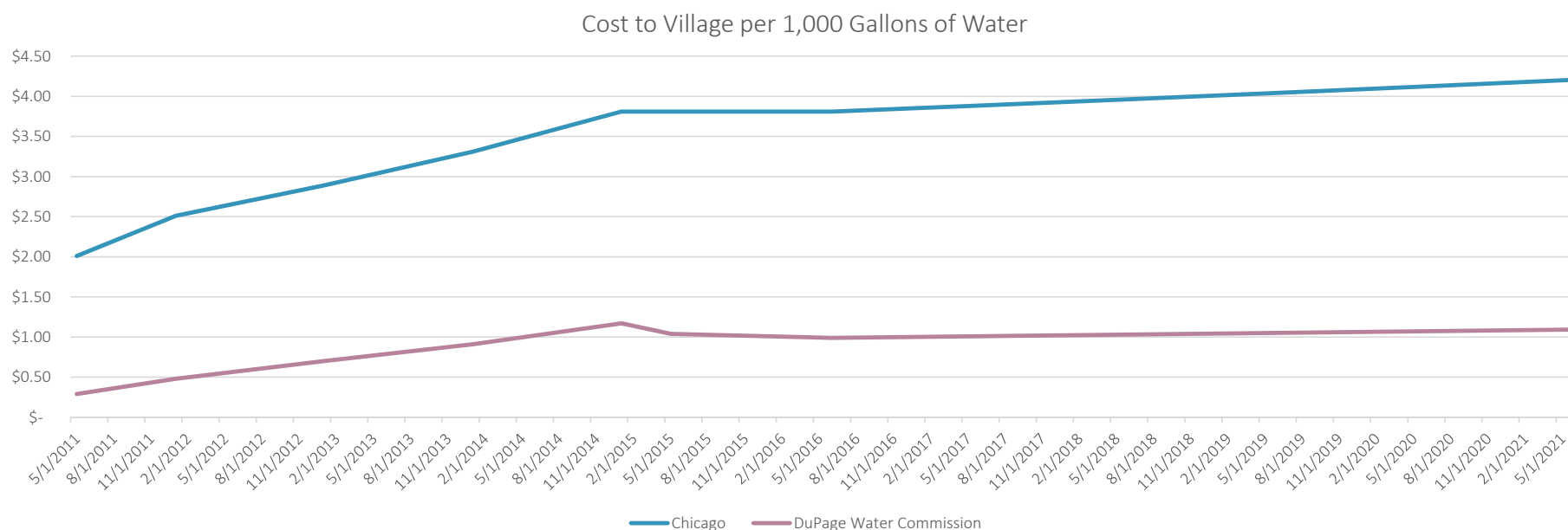
WATER & SEWER FUND

Historical Water Usage



- Graph depicts a 12 month rolling average water usage.
- Linear dotted line highlights projected continued trend in water usage.
- Due to conservation through energy efficiency efforts as well as improvements to the water infrastructure, gallons purchased has decreased over the past 10 years.
- The spike in 2013 was due to a summer drought and a major water main break.
- Water usage is projected to decrease, on average, by 2% annually.
- Usage decreases have been greater than 2% in some years over the past 5 years. The Village will need to monitor usage closely to ensure our rates are appropriate.

Historical and Projected Water Costs



- Sharp increases in rates were experienced from 2012 to 2015 as the City of Chicago raised the rates it charged for water.
- DuPage Water Commission announced a decrease in its cost for delivering water as of May 1, 2015.
- City of Chicago projects rates shall be increased effective June 1, 2016 and every year thereafter by CPI (max of 5%). Future years are projected to increase each June 1 by 3% for both City of Chicago rates and DuPage Water Commission rates.

Building the Water & Sewer Fund Forecast: Key Assumptions - Revenues

	FY16 Budget (thousands)	Average Historical Growth (2011-2016)	Projected Annual Growth (2017-2021)
Metered Water & Sewer Revenue	\$12,848	8%	1.5-3.0% ¹
Intergovernmental Sewer Fees	\$1,090	10%	1.5-3.0% ²
Connection Fees	\$89	15%	2.0% ³
Sewer Repair Fee	\$285	0%	0.0% ⁴
Inspections & Permits	\$102	11%	2.0% ⁵
Other Revenues (combined)	\$183	23%	1.0% ⁶

Footnotes:

1. Assumes a 1.5% rate increase in 2017; 2% in 2018; and 3% annually thereafter.
2. Intergovernmental fees are effected by Village rates as well as projected GWA budget.
3. Connection fees occur from new development or annexation agreements. A conservative 2% is projected.
4. This fee is a flat fee added to the Village Services Bill and is not anticipated to increase.
5. Inspections & Permit performance is tied to the performance of the housing market and building permits.
6. Includes SSA taxes, interest income, and other miscellaneous revenue. A conservative projection of 1.0% is used as these revenues tend to be incidental in nature. SSA taxes will remain flat.

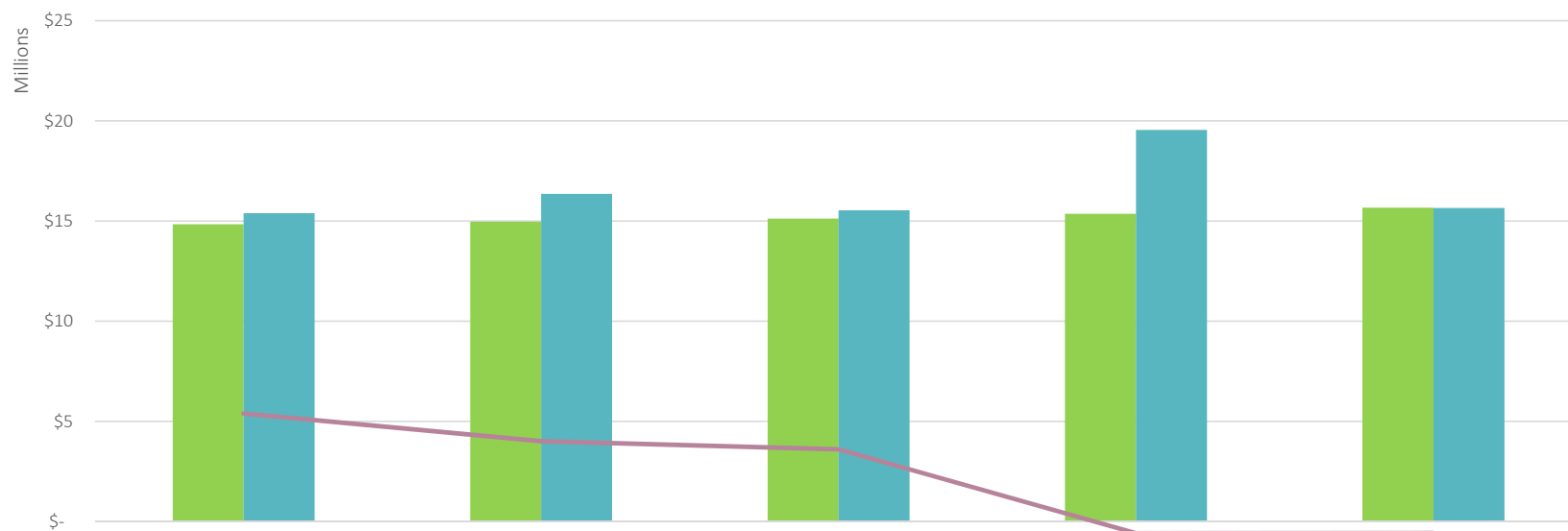
Building the Water & Sewer Fund Forecast: Key Assumptions - Expenditures

	FY16 Budget (thousands)	Average Historical Growth (2011- 2016)	Projected Annual Growth (2017-2021)
Salaries, Overtime and FICA	\$1,137	3.5%	3.0% ¹
Pension	\$103	0.1%	2.0% ²
Health Insurance	\$142	2.7%	4.0% ³
Water Purchases	\$4,598	22.8%	-4.8% ⁴
Glenbard Wastewater	\$3,608	3.7%	4.3% ⁵
Contractual Services	\$1,079	11.6%	3.0% ⁶
Commodities	\$36	16.1%	3.0% ⁷
Capital Outlay	\$4,844	24.1%	23.1% ⁸
Transfers	\$842	-1.9%	3.0% ¹
Debt Service	\$108	0.0%	0.0% ⁹

Footnotes:

1. Average salary increase has ranged from 2-3% over the last several years. Transfers are closely tied to changes in personnel expenses.
2. IMRF pension costs are stabilizing and are expected to trend closely to salary increases in the future.
3. The Village's insurance pool has helped to beat the market increases for health insurance.
4. In this model, a decrease is shown in year 1, small increases thereafter.
5. Based upon a 3% operating increase and capital increases according to GWA capital plan.
6. Historical increases based upon adding GIS capabilities and upgrades to software systems.
7. Assumed escalator of 3.0%
8. Several large projects are on the horizon including Roosevelt Road Water Main and Water Meter Replacement.
9. Debt service for the Lambert Farms IEPA loan will remain consistent over the forecast.

Annual Water & Sewer Fund Forecast

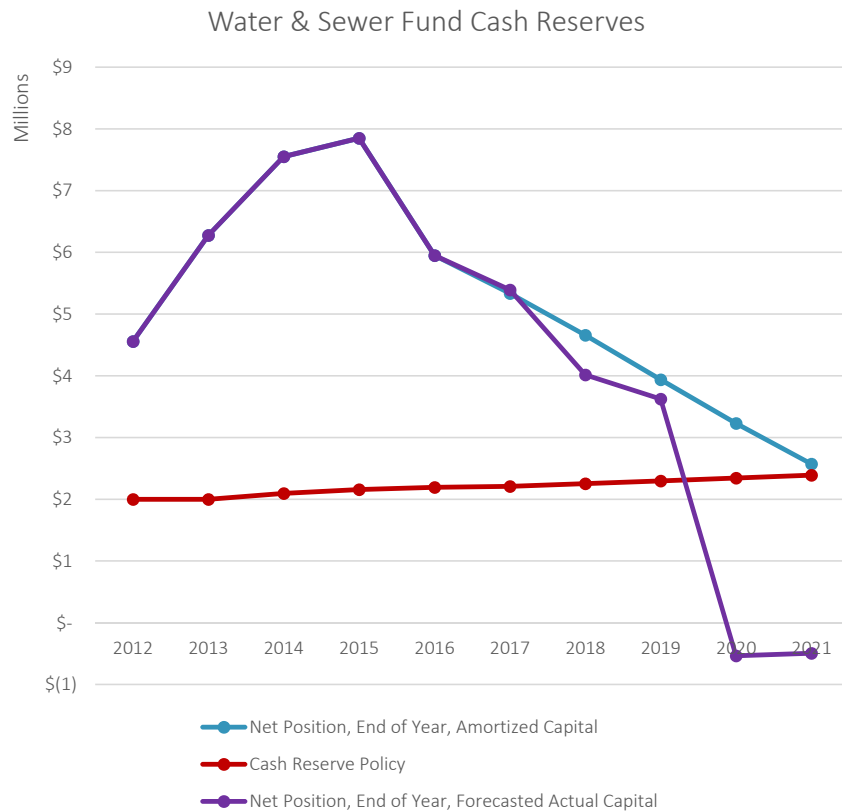


	2017	2018	2019	2020	2021
Total Revenues	\$14,833,978	\$14,970,480	\$15,124,950	\$15,361,641	\$15,662,556
Total Expenses	\$15,392,334	\$16,353,838	\$15,531,764	\$19,545,114	\$15,653,928
Fund Position End of Year	\$5,391,566	\$4,008,208	\$3,601,393	\$(582,080)	\$(573,452)

■ Total Revenues
 ■ Total Expenses
 — Fund Position End of Year

- ∞ Volatility is experienced due to the timing of capital projects throughout the lifetime of the forecast.
- ∞ Current forecast shows that rate increases will be needed to keep pace with the capital program.
- ∞ Water meter replacement slotted for 2020-2022.

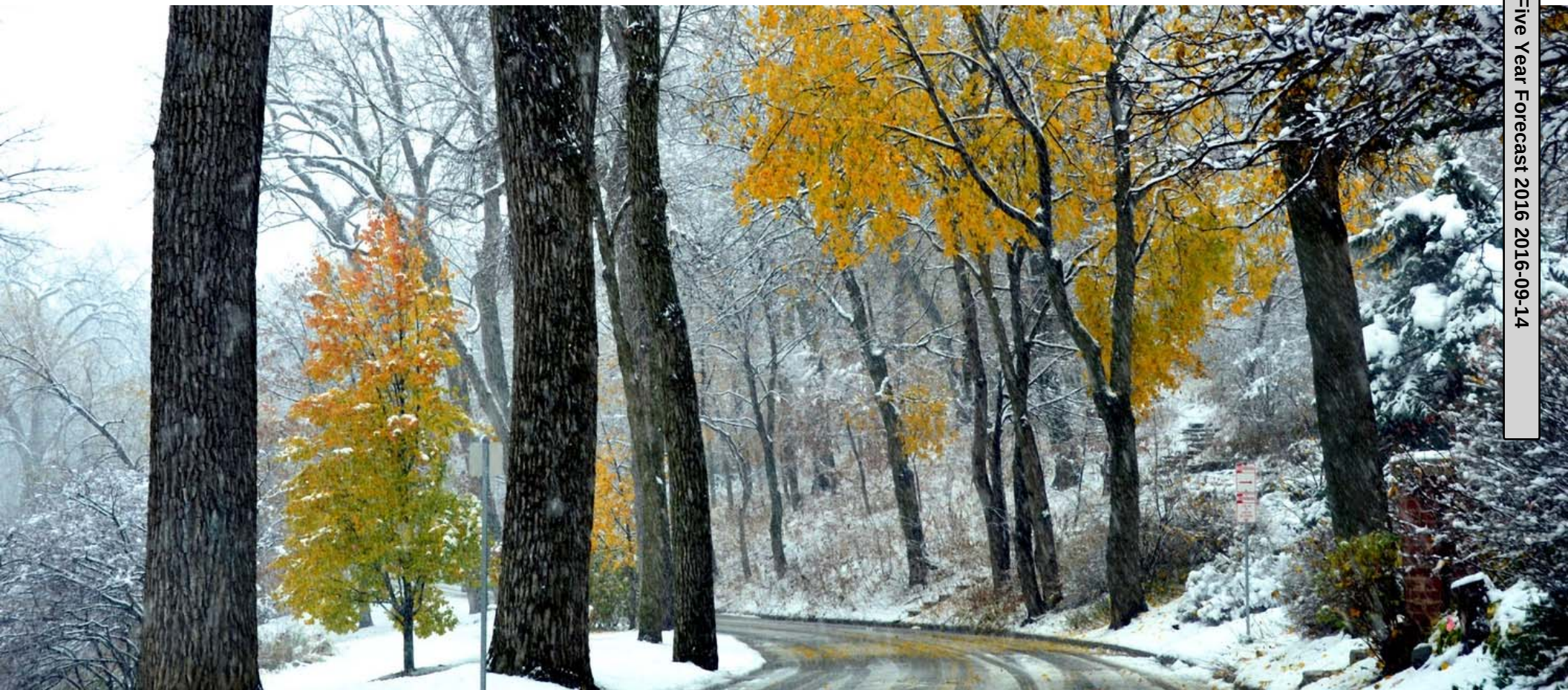
Water & Sewer Cash Reserve Projections



- ∞ Cash reserve policy grows by CPI each year, assumed 2%.
- ∞ Amortized capital line straight-lines capital budget over the next 9 years into a consistent spend each year.
- ∞ Forecasted capital line includes anticipated actual cost of the projects.
- ∞ Cash reserve policy does not take into account the savings needed to fund capital improvements. There may be years the cash reserves need to be above policy in order to meet future capital needs.
- ∞ A drought in 2013 increased the cash reserves.

Next Steps for Water & Sewer Fund

- ∞ The Village will revisit the capital plan in preparation for the 2017 budget.
- ∞ This rate forecast will be updated again in the Fall to prepare for rate discussions.
- ∞ A rate study may be warranted in future years to examine options for setting rates and to determine if changes should be made from the current model.



CAPITAL PROJECTS FUND

Building the Capital Projects Fund Forecast: Key Assumptions - Revenues

	FY16 Budget (thousands)	Average Historical Growth (2006-2015)	Projected Annual Growth (2017-2021)
Property Taxes	\$3,547	3.1%	3.0% ¹
Telecommunications Tax	\$888	-2.5%	-2.5% ²
Electricity Use Tax	\$1,000	-0.4%	0.0% ³
Natural Gas Use Tax	\$335	1.4%	1.4% ³
Real Estate Transfer Tax	\$705	1.8%	4.0% ⁴
Interest Income	\$10	-17.0%	1.0% ⁵
Other Revenues	\$543	N/A	N/A ⁶

Footnotes:

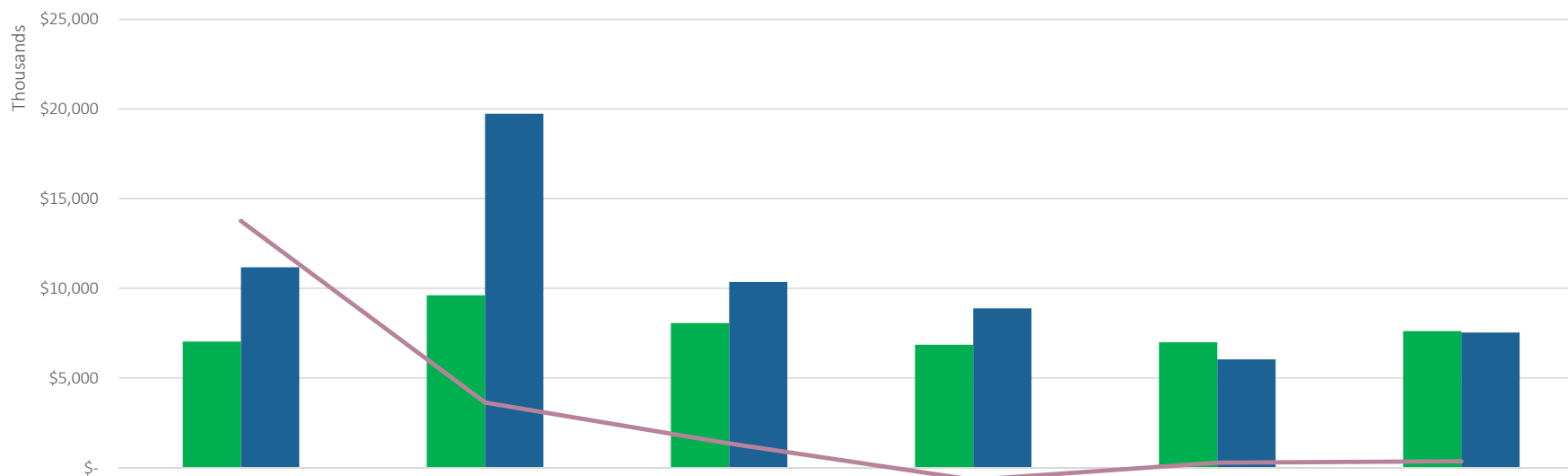
1. Assumes 2% growth in CPI and 1% growth in new construction/annexations.
2. Telecommunication taxes have decreased due to a decline in the number of land lines. The Village anticipates this revenue will continue to decrease.
3. Electricity and Natural Gas Use Taxes are anticipated to grow at their historical rates.
4. Real Estate transfer tax is \$3 per \$1,000 of the sales price of the house. This revenue stream is affected by increases in housing prices and increased sales volume. The assumption is based upon a 3% increase in housing values and 2% increase in sales volume. Zillow indicates the median house value has gone up 9% over the past year and predicts a 0.5% increase in the coming year. There was a 23% increase in number of stamps issued from 2013 to 2014.
5. Only a very minor increase in interest income is anticipated as interest rates are anticipated to rise very gradually.
6. Other revenues include grant revenue and miscellaneous revenue, which can not be predicted in future years. Major grants which the Village reasonably believes it will receive are included in the forecast.

Capital Projects Fund – Expenditures

Expenditure Type	2016 Budget	2017	2018	2019	2020	2021
Ancillary expenditures	\$4,500	\$16,000	\$16,000	\$16,000	\$41,000	\$16,000
Pavement Preservation	\$618,700	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Non-Roadway Construction Projects	\$1,383,000	\$3,275,000	\$375,000	\$375,000	\$375,000	\$375,000
Police Station*	\$11,800,000	\$11,800,000	\$0	\$0	\$0	\$0
Roadway Program	\$5,988,000	\$2,953,000	\$8,274,006	\$6,801,680	\$3,925,262	\$5,441,780
Engineering	\$220,300	\$225,000	\$230,000	\$235,000	\$240,000	\$245,000
Debt Service	\$956,600	\$954,044	\$953,544	\$952,844	\$956,494	\$954,543
Total	\$20,971,100	\$19,623,953	\$10,348,550	\$8,880,524	\$6,037,756	\$7,532,324

*Only \$1.5 million is anticipated to be spent for the police station in 2016. Thus, the remainder of the project is anticipated to be spent in 2017 and has been slotted accordingly.

Capital Projects Fund Forecast

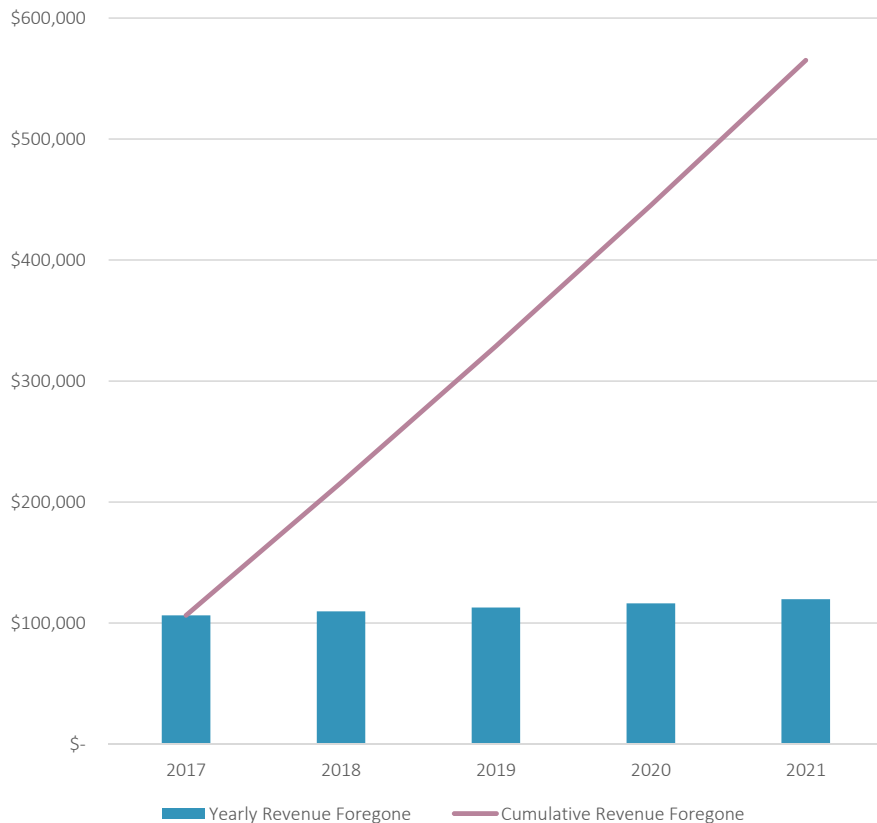


	2016	2017	2018	2019	2020	2021
Revenues	\$7,028,524	\$9,605,770	\$8,062,958	\$6,855,217	\$6,987,680	\$7,615,485
Expenditure	\$11,170,528	\$19,723,953	\$10,348,550	\$8,880,524	\$6,037,756	\$7,532,324
Fund Balance EOY	\$13,750,167	\$3,631,984	\$1,346,392	\$(678,915)	\$271,009	\$354,170

Revenues Expenditure Fund Balance EOY

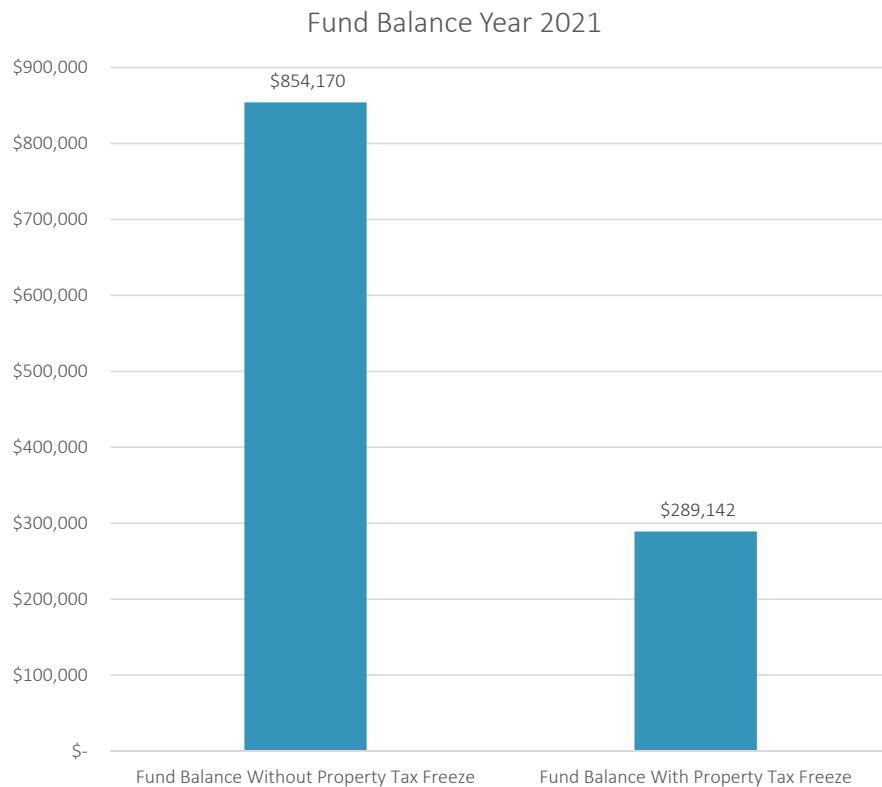
- ∞ In the Capital Projects Fund, expenditures vary year-to-year dependent upon the types of projects that are undertaken.
- ∞ 2019 is projected to have a negative fund balance. Projects will need to be adjusted or deferred to eliminate this negative balance.

What would a property tax freeze cost the Village over 5 years in the Capital Projects Fund?



- ∞ The Village is a home rule community that is not legally bound by tax caps.
- ∞ However, the Village traditionally holds itself to the tax cap philosophy, which means the Village increases its levy for new growth and CPI only. This philosophy favors gradual increases over time rather than creating spikes in property tax rates.
- ∞ Legislation in Springfield may limit the Village's ability to increase the levy.
- ∞ Over 5 years, the Village would forego \$565,000 of revenue that would have to be made up from other revenue sources or through reductions to our capital plan.
- ∞ Funding for capital projects will be compromised if property taxes are frozen.

Comparison of Ending Fund Balance with Property Tax Freeze



- ∞ This slide shows the yearly and cumulative impact in the year 2021 if the Village could not increase its tax levy.
- ∞ Fund Balance in the Year 2021 would be projected to be \$289,142 if property taxes were frozen versus \$854,170.

Unscheduled/Unfunded Projects

- ∞ Several projects remain unscheduled and unfunded, namely those projects in the chart at right.
- ∞ Future planning will need to address how to fund these needs.
- ∞ Grant funds will be sought to address some of the funding needs, particularly for the Pedestrian Tunnel and Viaduct/Underpass.

Project	Estimated Cost	Notes
CBD Pedestrian Bridge/Train Station	\$10,000,000	Unscheduled/Unfunded
Viaduct/Underpass	\$50,000,000	Unscheduled/Unfunded
CBD Parking Structure(s)	??	Village portion of mixed use private development
Fire Station(s)	\$5-10 million	Unscheduled/Unfunded
Civic Center	\$1.5 – 2.5 million	Unscheduled/Unfunded

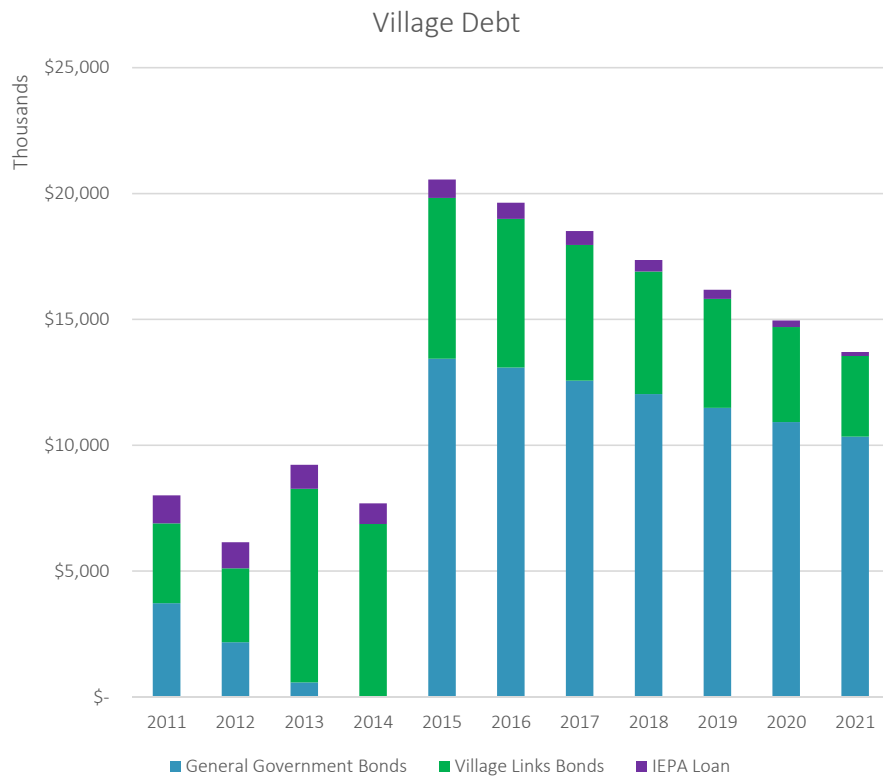
Next Steps for Capital Project Fund

- ∞ The Five Year Capital Plan will be updated as part of the budget cycle.
- ∞ The Village must await decisions in Springfield on any property tax freeze that is passed and must respond accordingly to update its Capital Projects Fund forecast and methodology.
- ∞ The Village Board must provide direction on the increase to the 2016 property tax levy.
- ∞ The Village Board must provide direction on unscheduled/unfunded projects and how to proceed forward.



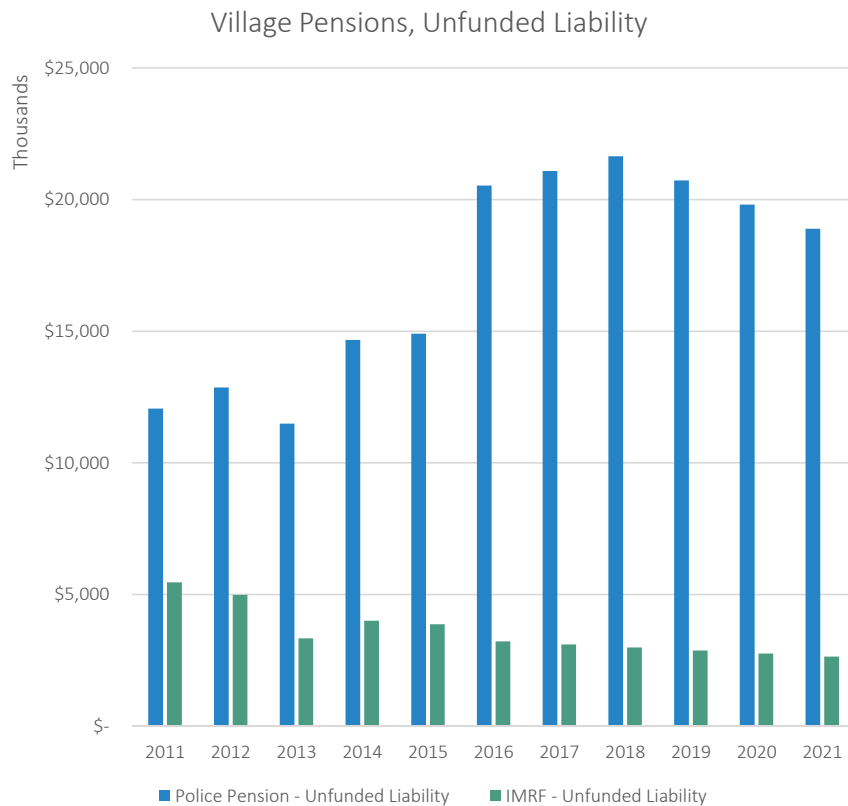
LONG TERM LIABILITIES

Village Debt



- ∞ Issuance of General Government Bonds for police station project in 2015.
- ∞ Gradual debt repayment over the five year forecast.

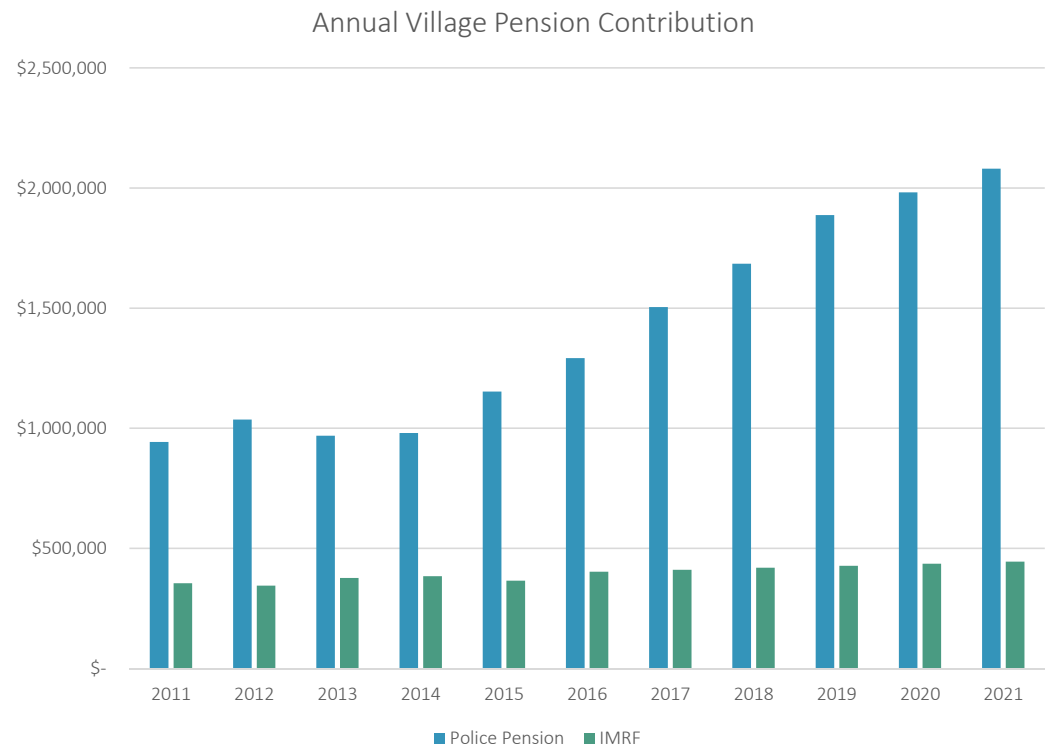
Village Pensions



- ∞ Village has two pensions, the Police Pension Fund and the Illinois Municipal Retirement Fund (IMRF).
- ∞ The increase in police pension is due to a duty disability, increases to the mortality ages, decreases in the investment rate return assumption in 2014-2016 (and projected for 2017 and 2018).
- ∞ Beginning in 2018, the unfunded liabilities decrease assuming the actuarial assumptions are met.

Annual Village Pension Contributions

- ∞ Police Pension annual contributions grow are projected to grow at 5-18% per year due to revision of actuarial assumptions.
 - ∞ 2016 Contribution (6.75%): \$1,292,000
 - ∞ 2017 Contribution (6.5%): \$1,620,000
 - ∞ 2017 Contribution (6.5%) est.: \$1,814,400
- ∞ IMRF contributions are anticipated to increase minimally. The anticipated rate change from 2016 to 2017 is from 10.82% of covered payroll to 10.34%.



Next Steps for Long Term Liabilities

- ∞ The Village will need to revisit the actuarial assumptions for the Police Pension this fall in preparation for the tax levy discussion.
- ∞ The Village will need to be mindful of the negative impact that the increasing pension contributions will have on the General Fund.
- ∞ The Village will need to be mindful of the impact freezing property taxes will have on its ability to pay off debt and meet capital needs in the future.



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 09/19/16 06:30 PM
Department: Planning & Development
Department Head: Staci Hulseberg
Category: Ordinance
Prepared By: Kelly Purvis

SCHEDULED

ORDINANCE (ID # 2409)

DOC ID: 2409

Planning and Development Director Staci Hulseberg will review the Village Links/Reserve 22 special use permit for indoor and outdoor live entertainment.

Background: On May 26, 2015 in accordance with Ordinance 6321 the Village Links/Reserve 22 was granted Zoning Code Text Amendments, a Zoning Variation, and a Special Use Permit to allow live entertainment in the CR District. The Village Board granted the Special Use for a trial period of four months. When the trial period ended the Village Links Management returned to the Village Board to request an extension of the Special Use.

On August 25, 2015, by the adoption of Ordinance 6348, the Village Board again, approved a Special Use Permit to allow live entertainment at the Village Links. Per the Ordinance, the Special Use Permit was valid for a 1-year trial period which expired August 31, 2016. As suggested, the Petitioner is returning to the Village Board for further review. At its full discretion, the Board may modify any conditions of approval placed on this permit. A copy of Ordinances 6321 and 6348 are attached for the Board's reference.

Over the course of the two trial periods, The Village Links has held 12 outdoor events on the patio with only one resident complaint for noise. The acoustic guitarist immediately lowered the volume on the speaker and resolved the issue. Management has demonstrated its commitment to controlling the volume of the outdoor live entertainment to the satisfaction of its neighbors. The Village Links has complied with all conditions in the previous Ordinances including only hosting events on Thursday, Friday, and Saturday evenings while only lightly amplifying musical instruments and voice to the extent necessary to serve the immediate audience.

As required by Ordinance 6321, a community council was formed of surrounding property owners to discuss any issues relating to the provision of outdoor live entertainment on the property. A meeting of the council was held on Thursday, July 21 at 7:00pm in the Civic Center Board Room. There was little or no response by the community council representatives regarding this meeting; the only representatives in attendance were the Village Links property owner and the Raintree neighborhood representative, Beth Powers. No complaints were voiced at this meeting.

Live entertainment has enhanced night time revenues for the Village Links by 27%-54% (please see attached chart) without disruption to surrounding residents. At this time, The Village Links Management is requesting that the conditions of approval of the permit be modified to eliminate any language in the previous Ordinance restricting the hosting of live entertainment events to Thursday, Friday, and Saturday nights. In addition the Village Links would like to be granted a Special Use Permit that does not require annual review by the Village Board.

The revised conditions of approval that Village Links is requesting are black-lined below.

- a) That no outdoor live entertainment shall be permitted on any evening past 8:00 pm preceding a regular school day as defined by the local grammar and high school calendars.
- b) ~~That outdoor live entertainment shall only be permitted on a Thursday, Friday, or Saturday; provided that no more than six (6) live entertainment events shall be permitted on Friday and Saturday nights during the term of the special use trial period.~~
- c) That all outdoor entertainment shall end by 10:00 pm.
- d) That a community council ~~be formed~~ **continue to meet** annually to discuss any issues related to the provision of outdoor live entertainment on the property that may impact the surrounding property owners. At a minimum, the community council shall include a member of Village Links staff, a member of the Police Department, one representative from the Raintree neighborhood, one representative from the Parkside Avenue neighborhood and one representative from the Butterfield Manor neighborhood. The community council shall meet a minimum of once a year and, at their discretion, may choose to meet more often. The first meeting of the community council **for the upcoming year** shall occur within 30 days of outdoor live entertainment being provided.
- e) ~~That on Thursday evenings, amplification of voice and an acoustic guitar are permitted. On Friday and Saturday evenings,~~ **That** musical instruments and voice shall be only lightly amplified to the extent needed to serve the immediate audience.
- f) ~~That the Special Use Permit granted herein shall be valid for a trial period through August 31, after which the petitioner shall return to the Village Board for further review, at which time the approval may be modified at the full discretion of the Village Board. A courtesy notice to neighbors previously notified of the special use permit public hearing, within 350 feet of the subject property, shall be provided in advance of the Village Board meeting.~~
- g) This Special Use Permit does not preclude the Village Links/Reserve 22 from seeking approval of a Special Event Waiver for additional events which shall be approved by the Village Board.

Village Board Action. The Village Board is requested to review the previously issued Special Use Permit and consider Village Link's proposed amendments to the permit. A draft Ordinance approving a revised Special Use Permit as requested by Village Links is attached for consideration by the Village Board at the September 19, 2016 workshop.

Attachments. Ordinance 6321
Ordinance 6348
Proposed Ordinance
Village Links Revenue Chart

Ordinance (ID # 2409)

Meeting of September 19, 2016

Cc: Jeff Vesevick, General Manager of The Village Links/Reserve 22

X:\Plandev\PLANNING\DEVELOPMENT PROJECTS\Winchell\Village Links\Live Entertainment\2016 SUP\VB
Memo 09122016.docx

Village of Glen Ellyn

Ordinance No. ____

**An Ordinance Amending Ordinance 6348 Which Granted Approval of
a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way
to Allow Outdoor Live Entertainment
Glen Ellyn, IL 60137**

**Adopted by the
President and the Board of Trustees
of the Village of Glen Ellyn**

DuPage County, Illinois

This ____ Day of _____, 20 ____.

Published in pamphlet form by the authority of the
President and Board of Trustees of the Village of
Glen Ellyn, DuPage County, Illinois, this _____
day of _____, 20 ____.

Ordinance No. _____

**An Ordinance Amending Ordinance 6348 Which Granted Approval of
a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way
to Allow Outdoor Live Entertainment
Glen Ellyn, IL 60137**

Whereas, on August 25, 2015, the Village President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, adopted Ordinance 6348 which granted approval of a Special Use Permit to allow outdoor live entertainment at the Village Links/Reserve 22 located on property commonly known as 485 Winchell Way; and

Whereas, the aforementioned Special Use Permit was approved subject to a number of conditions one of which granted the approval for a 1-year trial period at which time the request was to be re-evaluated by the Village Board and the Village Board could, at its full discretion and without requiring any further hearings, rescind, extend or modify any of the conditions of approval; and

Whereas, the subject property is zoned CR Conservation Recreation district and is legally described as follows:

PARCEL 1

THAT PART OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION AND RUNNING THENCE NORTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET TO THE NORTHWEST CORNER OF SAID QUARTER; THENCE NORTH 89° 39' EAST ON THE NORTH LINE OF SAID SOUTHWEST QUARTER AND ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION, 1568.98 FEET TO THE CENTERLINE OF PARK BOULEVARD; THENCE SOUTH 4° 05' WEST ON SAID CENTERLINE, 173.97 FEET; THENCE SOUTH 53° 11' WEST, 1955.56 FEET TO THE PLACE OF BEGINNING, IN THE TOWNSHIP OF MILTON, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING THEREFROM THAT PART LYING WITHIN "WINCHELL WAY" PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 2

THAT PART OF SECTIONS 22 AND 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 23 AND RUNNING THENCE SOUTH 89° 36' WEST ON THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, 1344.28 FEET; THENCE SOUTH 89° 00' WEST ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22, 333.40 FEET TO THE CENTER LINE OF HILLCREST AVENUE, AS DEDICATED 66.0 FEET WIDE IN THE PLAT OF WHEATON ESTATES AS RECORDED AUGUST 7, 1925 AS DOCUMENT 197514 AND 197515; THENCE NORTH 0° 30' EAST ALONG SAID CENTER LINE, 3024.63 FEET TO THE NORTH LINE OF WILSON AVENUE, IF EXTENDED, IN SAID WHEATON ESTATES; THENCE SOUTH 89° 25' WEST ON SAID NORTH LINE OF WILSON AVENUE, 679.88 FEET TO THE EAST LINE OF LAMBERT ROAD AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 0° 3' EAST ON SAID EAST LINE OF LAMBERT ROAD, 300.0 FEET; THENCE NORTH 0° 31' WEST ON SAID EAST LINE, 66.0 FEET; THENCE NORTH 0° 17' EAST ON SAID EAST LINE, 265.0 FEET TO THE SOUTH LINE OF TAFT AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 25' EAST ON SAID SOUTH LINE OF TAFT AVENUE, 829.03 FEET TO THE NORTHWEST CORNER OF LOT 15 IN BLOCK 79 IN SAID SUBDIVISION; THENCE SOUTH 0° 30' WEST, 132.0 FEET TO THE SOUTHWEST CORNER OF SAID LOT 15; THENCE NORTH 89° 26' EAST ON THE SOUTH LINE, IF EXTENDED, OF LOT 15 TO LOT 1, BOTH INCLUSIVE, AND SOUTH LINE AND SOUTH LINE, IF EXTENDED, OF LOTS 14 TO LOT 6, BOTH INCLUSIVE, IN BLOCK 80 IN SAID SUBDIVISION, TO A POINT IN THE WEST LINE OF LOT 3 IN SAID BLOCK 80; THENCE SOUTH 0° 31' WEST ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 3, 4 AND 5 IN SAID BLOCK 80 AND ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 1, 2, 3, 24, 25 AND 26 IN BLOCK 78 IN SAID SUBDIVISION, 564.2 FEET TO A POINT IN THE SOUTH LINE OF WILSON AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 42' EAST ON SAID SOUTH LINE OF WILSON AVENUE, 366.0 FEET TO THE EAST LINE OF SAID WHEATON ESTATES, RECORDED AS DOCUMENT 197514; THENCE SOUTH 0° 32' WEST ON SAID EAST LINE OF WHEATON ESTATES, 281.25 FEET TO A POINT IN THE NORTH LINE OF HARDING AVENUE, AS DEDICATED IN GLEN ACRES SUBDIVISION (SAID NORTH LINE BEING ALSO THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 23); THENCE SOUTH 89° 42' WEST ON SAID NORTH LINE, 78.85 FEET TO THE POINT OF INTERSECTION OF SAID NORTH LINE WITH THE WEST LINE, IF EXTENDED NORTH, OF LOT 11 IN BLOCK 9 IN GLEN PARK SUBDIVISION, A RESUBDIVISION OF PART OF SAID GLEN ACRES SUBDIVISION; THENCE SOUTH 0° 34' WEST ON SAID WEST LINE OF LOT 11 AND ON THE WEST LINES AND WEST LINES, IF EXTENDED, OF LOTS 18 IN BLOCK 9 AND LOTS 11 AND 18 IN BLOCK 10 AND, LOTS 11 AND 18 IN BLOCK 11, IN SAID GLEN PARK SUBDIVISION AND THE WEST LINE OF LOT 5 IN BLOCK 11 IN SAID GLEN ACRES SUBDIVISION, 1341.91 FEET TO A POINT IN THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 23; THENCE SOUTH 89° 39' WEST ON

SAID NORTH LINE OF THE SOUTHWEST QUARTER, 188.0 FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SOUTHWEST QUARTER; THENCE SOUTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET, TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING THEREFROM LOT 23 IN BLOCK 80 OF SAID WHEATON ESTATES, TOGETHER WITH THE VACATED PORTION OF PERSHING AVENUE SOUTH OF AND ADJOINING SAID LOT 23, ALSO EXCEPTING THEREFROM THAT PART LYING WITHIN "WINCHELL WAY" PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 3

THAT PART OF THE EAST HALF OF SECTION 22, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22 WITH THE EAST LINE, IF EXTENDED, OF LAMBERT ROAD AND RUNNING THENCE NORTHERLY ON THE EAST LINE OF SAID LAMBERT ROAD 3062.2 FEET TO THE NORTH LINE OF WILSON AVENUE; THENCE EASTERLY ON THE NORTH LINE OF SAID WILSON AVENUE 712.88 FEET TO THE EAST LINE OF HILLCREST AVENUE; THENCE SOUTHERLY ON SAID EAST LINE OF HILLCREST AVENUE 3024.63 FEET TO SAID SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 22; THENCE WESTERLY ON SAID SOUTH LINE 982.0 FEET TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS.

EXCEPTING THEREFROM ALL PARCELS ABOVE ANY PARTS TAKEN FOR ROADWAY.

P.I.N.s: 05-23-105-013, 05-23-300-003, 05-23-308-004, 05-23-400-002, 05-22-208-012, 05-22-406-003, 05-22-206-015, 05-23-114-019, 05-23-122-021, 05-23-103-026, 05-23-118-025 and 05-23-126-014; and

Whereas, the conclusion of the 1-year Special Use Permit trial period has occurred and the Village Links/Reserve 22 Department (hereinafter "The Village Links") has requested that the Special Use Permit be extended and the conditions of approval amended; and

Whereas, the Village President and Board of Trustees have considered the request by The Village Links to modify the conditions of approval of the Special Use Permit approved on August

25, 2015 to allow outdoor live entertainment on the subject property and have determined that it is in the best interest of the Village of Glen Ellyn to approve the request.

Now, Therefore, be it Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The Village President and Board of Trustees hereby approve the petitioner's request for amendments to the Special Use Permit for The Village Links granted by Ordinance 6348 to allow outdoor live entertainment at the Village Links/Reserve 22 located on property commonly known as 485 Winchell Way.

Section Two: Section Three of Ordinance 6348 is hereby repealed and replaced in its entirety to read as follows:

"Section Three: *This grant of approval of requested Zoning Code Text Amendments, Special Use Permit and Zoning Variation is subject to the following conditions:*

1. *All live entertainment shall be operated in substantial conformance with the plans submitted and the testimony presented at the May 14, 2015 public hearing before the Plan Commission and with the petitioner's application packet including the following plans and documents referenced below, as though they were attached to this Ordinance:*
 - a. *Zoning Code Text Amendment application signed April 7, 2015*
 - b. *Application for Zoning Variation signed April 7, 2015*
 - c. *Application for Special Use Permit signed April 7, 2015*
 - d. *Narrative Statement (no date) a copy of which is attached hereto as Exhibit "C"*
 - e. *Floor Plan (no date) a copy of which is attached hereto as Exhibit "D"*

and these plans and documents shall be filed with and made part of the permanent records of the Glen Ellyn Planning and Development Department.

2. *The Special Use Permit approved herein to allow outdoor live entertainment on the property is further conditioned upon the following:*

- a. *That no outdoor live entertainment shall be permitted on any evening past 8:00 pm preceding a regular school day as defined by the local grammar and high school calendars.*
- b. *That all outdoor entertainment shall end by 10:00 pm.*
- c. *That a community council continue to meet annually to discuss any issues related to the provision of outdoor live entertainment on the property that may impact the surrounding property owners. At a minimum, the community council shall include a member of The Links staff, a member of the Police Department, one representative from the Raintree neighborhood, one representative from the Parkside Avenue neighborhood and one representative from the Butterfield Manor neighborhood. The community council shall meet a minimum of once a year and, at their discretion, may choose to meet more often. The first meeting of the community council for the upcoming year shall occur within 30 days of outdoor live entertainment being provided.*
- d. *That musical instruments and voice shall be only lightly amplified to the extent needed to serve the immediate audience.*
- e. *This Special Use Permit does not preclude the Village Links/Reserve 22 from seeking approval of a Special Event Waiver for additional events which shall be approved by the Village Board."*

Section Four: This Ordinance shall be in full force and effect from and after the passage, approval, and publication in pamphlet form.

Section Five: The Village Clerk is authorized to record this Ordinance with the DuPage County Recorder of Deeds.

Section Six: Failure of the owners or other party in interest or a subsequent owner or other party in interest to comply with the terms of this Ordinance, after execution of such Ordinance, shall subject the owners or party in interest to the penalties set forth in Section 10-10-18(A) and (B) of the Village of Glen Ellyn Zoning Code.

Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois, this _____ day of _____, 20 _____.

Ayes:

Ordinance (ID # 2409)

Meeting of September 19, 2016

Nays:**Absent:****Abstention:****Recusal:**

Approved by the Village President of the Village of Glen Ellyn, Illinois, this _____ day of _____, 20____.

Village President of the
Village of Glen Ellyn, Illinois

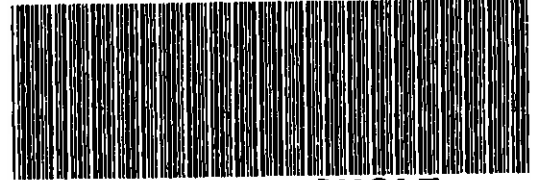
Attest:

Village Clerk of the
Village of Glen Ellyn, Illinois

(Published in pamphlet form and posted on the ____ day of _____.)

ATTACHMENTS:

- Ordinance 6321 (PDF)
- Ordinance 6348 (PDF)
- Proposed Ordinance (PDF)
- Village Links Revenue Chart (PDF)

**FRED BUCHOLZ**

DUPAGE COUNTY RECORDER

JUN 30, 2015 1:21 PM
OTHER \$54.00 05-22-206-015
028 PAGES R2015-070636

Village of Glen Ellyn

ORDINANCE NO. 6321

An Ordinance Granting Approval of
Zoning Code Text Amendments, a Zoning Variation and a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way
to Allow Indoor and Outdoor Live Entertainment
Glen Ellyn, IL 60137

Adopted by the
President and the Board of Trustees
Of the

Village of Glen Ellyn

DuPage County, Illinois

This 26th day of May, 2015

Published in pamphlet form by the authority
of the President and Board of Trustees of the
Village of Glen Ellyn, DuPage County,
Illinois, this 27th day of May,
2015.

PREPARED BY AND MAIL TO:
VILLAGE OF GLEN ELLYN
ATTN: VILLAGE CLERK
535 Duane Street
Glen Ellyn, IL 60137

Ordinance No. 6321

**An Ordinance Granting Approval of
Zoning Code Text Amendments, a Zoning Variation and a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way *per*
to Allow Indoor and Outdoor Live Entertainment
Glen Ellyn, IL 60137**

Whereas, the Village of Glen Ellyn Recreation Department has petitioned the Village President and Board of Trustees for approval of the following:

1. The following Text Amendments to the Glen Ellyn Zoning Code:
 - a. An Amendment to Section 10-5-14 to allow indoor live entertainment in the CR district.
 - b. An Amendment to Section 10-4-3(B)3 to establish outdoor live entertainment as a Special Use in the CR district.
2. A Variation from Section 10-5-14(1)c of the Zoning Code to allow more than 25% of the gross floor area of the building to be designated for live entertainment.
3. A Special Use Permit in accordance with 10-4-3(B)3 of the Zoning Code to allow live entertainment on the property.

all to allow indoor and outdoor live entertainment at the Village Links/Reserve 22 located at 485 Winchell Way; and

Whereas, the subject property is zoned CR Conservation Recreation district and is legally described as follows:

PARCEL 1

THAT PART OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION AND RUNNING THENCE NORTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET TO THE NORTHWEST CORNER OF SAID QUARTER; THENCE NORTH 89° 39' EAST ON THE NORTH LINE OF SAID SOUTHWEST QUARTER AND ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION, 1568.98 FEET TO THE CENTERLINE OF PARK BOULEVARD; THENCE SOUTH 4° 05' WEST ON SAID CENTERLINE, 173.97 FEET;

THENCE SOUTH 53° 11' WEST, 1955.56 FEET TO THE PLACE OF BEGINNING, IN THE TOWNSHIP OF MILTON, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING THEREFROM THAT PART LYING WITHIN "WINCHELL WAY" PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 2

THAT PART OF SECTIONS 22 AND 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 23 AND RUNNING THENCE SOUTH 89° 36' WEST ON THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, 1344.28 FEET; THENCE SOUTH 89° 00' WEST ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22, 333.40 FEET TO THE CENTER LINE OF HILLCREST AVENUE, AS DEDICATED 66.0 FEET WIDE IN THE PLAT OF WHEATON ESTATES AS RECORDED AUGUST 7, 1925 AS DOCUMENT 197514 AND 197515; THENCE NORTH 0° 30' EAST ALONG SAID CENTER LINE, 3024.63 FEET TO THE NORTH LINE OF WILSON AVENUE, IF EXTENDED, IN SAID WHEATON ESTATES; THENCE SOUTH 89° 25' WEST ON SAID NORTH LINE OF WILSON AVENUE, 679.88 FEET TO THE EAST LINE OF LAMBERT ROAD AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 0° 3' EAST ON SAID EAST LINE OF LAMBERT ROAD, 300.0 FEET; THENCE NORTH 0° 31' WEST ON SAID EAST LINE, 66.0 FEET; THENCE NORTH 0° 17' EAST ON SAID EAST LINE, 265.0 FEET TO THE SOUTH LINE OF TAFT AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 25' EAST ON SAID SOUTH LINE OF TAFT AVENUE, 829.03 FEET TO THE NORTHWEST CORNER OF LOT 15 IN BLOCK 79 IN SAID SUBDIVISION; THENCE SOUTH 0° 30' WEST, 132.0 FEET TO THE SOUTHWEST CORNER OF SAID LOT 15; THENCE NORTH 89° 26' EAST ON THE SOUTH LINE, IF EXTENDED, OF LOT 15 TO LOT 1, BOTH INCLUSIVE, AND SOUTH LINE AND SOUTH LINE, IF EXTENDED, OF LOTS 14 TO LOT 6, BOTH INCLUSIVE, IN BLOCK 80 IN SAID SUBDIVISION, TO A POINT IN THE WEST LINE OF LOT 3 IN SAID BLOCK 80; THENCE SOUTH 0° 31' WEST ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 3, 4 AND 5 IN SAID BLOCK 80 AND ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 1, 2, 3, 24, 25 AND 26 IN BLOCK 78 IN SAID SUBDIVISION, 564.2 FEET TO A POINT IN THE SOUTH LINE OF WILSON AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 42' EAST ON SAID SOUTH LINE OF WILSON AVENUE, 366.0 FEET TO THE EAST LINE OF SAID WHEATON ESTATES, RECORDED AS DOCUMENT 197514; THENCE SOUTH 0° 32' WEST ON SAID EAST LINE OF WHEATON ESTATES, 281.25 FEET TO A POINT IN THE NORTH LINE OF HARDING AVENUE, AS DEDICATED IN GLEN ACRES SUBDIVISION (SAID NORTH LINE BEING ALSO THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 23); THENCE SOUTH 89° 42' WEST ON SAID NORTH LINE, 78.85 FEET TO THE POINT OF INTERSECTION OF SAID NORTH LINE WITH THE WEST LINE, IF EXTENDED NORTH, OF LOT 11 IN BLOCK 9 IN GLEN PARK SUBDIVISION, A RESUBDIVISION OF PART OF SAID GLEN ACRES SUBDIVISION; THENCE SOUTH 0° 34' WEST ON SAID WEST LINE OF LOT 11 AND ON THE WEST LINES

AND WEST LINES, IF EXTENDED, OF LOTS 18 IN BLOCK 9 AND LOTS 11 AND 18 IN BLOCK 10 AND, LOTS 11 AND 18 IN BLOCK 11, IN SAID GLEN PARK SUBDIVISION AND THE WEST LINE OF LOT 5 IN BLOCK 11 IN SAID GLEN ACRES SUBDIVISION, 1341.91 FEET TO A POINT IN THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 23; THENCE SOUTH 89° 39' WEST ON SAID NORTH LINE OF THE SOUTHWEST QUARTER, 188.0 FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SOUTHWEST QUARTER; THENCE SOUTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET, TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING THEREFROM LOT 23 IN BLOCK 80 OF SAID WHEATON ESTATES, TOGETHER WITH THE VACATED PORTION OF PERSHING AVENUE SOUTH OF AND ADJOINING SAID LOT 23, ALSO EXCEPTING THEREFROM THAT PART LYING WITHIN "WINCHELL WAY" PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 3

THAT PART OF THE EAST HALF OF SECTION 22, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22 WITH THE EAST LINE, IF EXTENDED, OF LAMBERT ROAD AND RUNNING THENCE NORTHERLY ON THE EAST LINE OF SAID LAMBERT ROAD 3062.2 FEET TO THE NORTH LINE OF WILSON AVENUE; THENCE EASTERLY ON THE NORTH LINE OF SAID WILSON AVENUE 712.88 FEET TO THE EAST LINE OF HILLCREST AVENUE; THENCE SOUTHERLY ON SAID EAST LINE OF HILLCREST AVENUE 3024.63 FEET TO SAID SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 22; THENCE WESTERLY ON SAID SOUTH LINE 982.0 FEET TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS.

EXCEPTING THEREFROM ALL PARCELS ABOVE ANY PARTS TAKEN FOR ROADWAY.

P.I.N.s: 05-23-105-013, 05-23-300-002, 05-23-308-002, 05-23-400-001, 05-22-208-012, 05-22-406-003, 05-22-206-015, 05-23-114-019, 05-23-122-021, 05-23-103-026, 05-23-118-025, 05-22-208-012 and 05-23-126-014; and

Whereas, following due and proper publication of notice in The Daily Herald not less than fifteen (15) nor more than thirty (30) days prior thereto, and following written notice to all property owners within 250 feet, and the placement of a placard on the subject property not less than fifteen (15) days prior thereto, the Plan Commission of the Village of Glen Ellyn conducted a public hearing

on May 14, 2015, at which hearing the Plan Commission considered the petitioner's request for approval of Zoning Code Text Amendments, a Zoning Variation and a Special Use Permit; and

Whereas, at the May 14, 2015 public hearing, the petitioner presented evidence and testimony in support of the requests and fifteen (15) people spoke and expressed opposition to the applications; and

Whereas, after having considered the evidence presented, including the exhibits and materials submitted, the Plan Commission made its findings of fact and recommendations as set forth in the minutes from the May 14, 2015 Plan Commission meeting, a draft of which is attached hereto as Exhibit "A", and by a vote of nine (9) "yes" and one (1) "no", the Plan Commission recommended approval of the requested Zoning Code Text Amendments and Zoning Variation and by a vote of six (6) "yes" and four (4) "no", the Plan Commission recommended approval of a Special Use Permit to allow outdoor live entertainment on the property with conditions; and

Whereas, the Village President and Board of Trustees have reviewed the evidence, exhibits, and materials presented at the May 14, 2015 Plan Commission public hearing and have considered the findings of fact and recommendations of the Plan Commission; and

Whereas, the President and Board of Trustees have determined that approving the requested Special Use Permit and Zoning Variation is consistent with the goals of the Glen Ellyn Zoning Code.

Now, Therefore, be it Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The minutes from May 14, 2015 Plan Commission public hearing, a draft of which is attached hereto as Exhibit "A", and the findings of fact therein and attached hereto as Exhibit "B" as well as in the preambles above are hereby adopted as the findings of fact of the

Village President and Board of Trustees based upon their review of the evidence, exhibits, and materials presented at the May 14, 2015 public hearing before the Plan Commission.

Section Two: Based upon the findings of fact and recommendations of the Plan Commission, as adopted herein, and the findings of fact and conclusions set forth in the preambles above and in Exhibit "B" attached hereto, the Village President and Board of Trustees hereby grant approval of the requested Zoning Code Text Amendments, Special Use Permit and Zoning Variation to accommodate indoor and outdoor live entertainment at the Village Links/Reserve 22 located at 485 Winchell Way.

Section Three: This grant of approval of requested Zoning Code Text Amendments, Special Use Permit and Zoning Variation is subject to the following conditions:

1. All live entertainment shall be operated in substantial conformance with the plans submitted and the testimony presented at the May 14, 2015 public hearing before the Plan Commission and with the petitioner's application packet including the following plans and documents referenced below, as though they were attached to this Ordinance:
 - a. Zoning Code Text Amendment application signed April 7, 2015
 - b. Application for Zoning Variation signed April 7, 2015
 - c. Application for Special Use Permit signed April 7, 2015
 - d. Narrative Statement (no date) a copy of which is attached hereto as Exhibit "C"
 - e. Floor Plan (no date) a copy of which is attached hereto as Exhibit "D"

and these plans and documents shall be filed with and made part of the permanent records of the Glen Ellyn Planning and Development Department.

2. The Special Use Permit approved herein to allow outdoor live entertainment on the property is further conditioned upon the following:
 - a. That no outdoor live entertainment shall be permitted during the school year as defined by the local grammar and high school calendars.
 - b. That outdoor live entertainment shall be permitted one night a week on a Thursday, Friday, or Saturday evening during the subject period.
 - c. That all outdoor entertainment end by 10:00 pm.
 - d. That a community council be formed to discuss any issues related to the provision of outdoor live entertainment on the property that may impact the surrounding property

owners. At a minimum, the community council shall include a member of The Links staff, a member of the Police Department, one representative from the Raintree neighborhood, one representative from the Parkside Avenue neighborhood and one representative from the Butterfield Manor neighborhood. The community council shall meet a minimum of once a year and, at their discretion, may choose to meet more often. The first meeting of the community council shall occur within 30 days of outdoor live entertainment being provided.

- e. That acoustic music only shall be permitted and no horns, drums or amplification of instruments shall be allowed, with the exception that vocals may be amplified.
- f. That the Special Use Permit granted herein shall be valid for a four month trial period after which the petitioner shall return to the Village Board for further review, at which time the approval may be modified at the full discretion of the Village Board.

Section Four: Sections 10-5-14 and 10-4-3 of the Glen Ellyn Zoning Code are hereby amended as set forth in Exhibit "E" attached hereto.

Section Five: The Village Clerk is hereby directed to cause the text of the Glen Ellyn Zoning Code to be amended as approved by this Ordinance and said amendments shall be inserted in proper order into the Zoning Code, and said Zoning Code shall be published and made available for inspection and purchase by the general public.

Section Six: This Ordinance shall be in full force and effect from and after the passage, approval, and publication in pamphlet form.

Section Seven: Failure of the owners or other party in interest or a subsequent owner or other party in interest to comply with the terms of this Ordinance, after execution of such Ordinance, shall subject the owners or party in interest to the penalties set forth in Section 10-10-18 (A) and (B) of the Village of Glen Ellyn Zoning Code.

Section Eight. The Village Clerk is hereby authorized to record this Ordinance with the DuPage County Recorder.

Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois, this

26th day of May, 20 15.

Ayes: Trustees Clark, Elliott (via telephone), Kenwood, Ladesse, O'Shea
and Senak

Nays: ϕ

Absent: ϕ

Approved by the Village President of the Village of Glen Ellyn, Illinois, this 26th

day of May, 20 15.



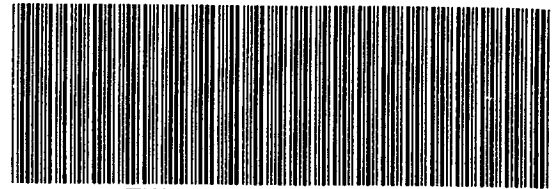
Village President of the
Village of Glen Ellyn, Illinois

Attest:



Village Clerk of the
Village of Glen Ellyn, Illinois

(Published in pamphlet form and posted on the 21st day of May 2015.)



FRED BUCHOLZ
DUPAGE COUNTY RECORDER
DEC.08,2015 11:34 AM
OTHER \$34.00 05-22-206-015
008 PAGES R2015-133381

Village of Glen Ellyn

Ordinance No. 6348

**An Ordinance Amending Ordinance 6321 Which Granted Approval of
Zoning Code Text Amendments, a Zoning Variation and a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way
to Allow Indoor and Outdoor Live Entertainment
Glen Ellyn, IL 60137**

**Adopted by the
President and the Board of Trustees
of the Village of Glen Ellyn
DuPage County, Illinois**
This 24th Day of August, 20 15.

Published in pamphlet form by the authority of the
President and Board of Trustees of the Village of
Glen Ellyn, DuPage County, Illinois, this 25th
day of August, 20 15.

Prepared by:
Village of Glen Ellyn
535 Duane Street
Glen Ellyn, IL 60137

Ordinance No. 1348

**An Ordinance Amending Ordinance 6321 Which Granted Approval of
Zoning Code Text Amendments, a Zoning Variation and a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way
to Allow Indoor and Outdoor Live Entertainment
Glen Ellyn, IL 60137**

Whereas, on May 26, 2015, the Village President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, adopted Ordinance 6321 which granted approval of, among other things, a Special Use Permit to allow outdoor live entertainment at the Village Links/Reserve 22 located on property commonly known as 485 Winchell Way; and

Whereas, the aforementioned Special Use Permit was approved subject to a number of conditions one of which granted the approval for a 4-month trial period at which time the request was to be re-evaluated by the Village Board and the Village Board could, at its full discretion and without requiring any further hearings, rescind, extend or modify any of the conditions of approval; and

Whereas, the subject property is zoned CR Conservation Recreation district and is legally described as follows:

PARCEL 1

THAT PART OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION AND RUNNING THENCE NORTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET TO THE NORTHWEST CORNER OF SAID QUARTER; THENCE NORTH 89° 39' EAST ON THE NORTH LINE OF SAID SOUTHWEST QUARTER AND ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION, 1568.98 FEET TO THE CENTERLINE OF PARK BOULEVARD; THENCE SOUTH 4° 05' WEST ON SAID CENTERLINE, 173.97 FEET; THENCE SOUTH 53° 11' WEST, 1955.56 FEET TO THE PLACE OF BEGINNING, IN THE TOWNSHIP OF MILTON, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING THEREFROM THAT PART LYING WITHIN "WINCHELL WAY" PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 2

THAT PART OF SECTIONS 22 AND 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 23 AND RUNNING THENCE SOUTH 89° 36' WEST ON THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, 1344.28 FEET; THENCE SOUTH 89° 00' WEST ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22, 333.40 FEET TO THE CENTER LINE OF HILLCREST AVENUE, AS DEDICATED 66.0 FEET WIDE IN THE PLAT OF WHEATON ESTATES AS RECORDED AUGUST 7, 1925 AS DOCUMENT 197514 AND 197515; THENCE NORTH 0° 30' EAST ALONG SAID CENTER LINE, 3024.63 FEET TO THE NORTH LINE OF WILSON AVENUE, IF EXTENDED, IN SAID WHEATON ESTATES; THENCE SOUTH 89° 25' WEST ON SAID NORTH LINE OF WILSON AVENUE, 679.88 FEET TO THE EAST LINE OF LAMBERT ROAD AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 0° 3' EAST ON SAID EAST LINE OF LAMBERT ROAD, 300.0 FEET; THENCE NORTH 0° 31' WEST ON SAID EAST LINE, 66.0 FEET; THENCE NORTH 0° 17' EAST ON SAID EAST LINE, 265.0 FEET TO THE SOUTH LINE OF TAFT AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 25' EAST ON SAID SOUTH LINE OF TAFT AVENUE, 829.03 FEET TO THE NORTHWEST CORNER OF LOT 15 IN BLOCK 79 IN SAID SUBDIVISION; THENCE SOUTH 0° 30' WEST, 132.0 FEET TO THE SOUTHWEST CORNER OF SAID LOT 15; THENCE NORTH 89° 26' EAST ON THE SOUTH LINE, IF EXTENDED, OF LOT 15 TO LOT 1, BOTH INCLUSIVE, AND SOUTH LINE AND SOUTH LINE, IF EXTENDED, OF LOTS 14 TO LOT 6, BOTH INCLUSIVE, IN BLOCK 80 IN SAID SUBDIVISION, TO A POINT IN THE WEST LINE OF LOT 3 IN SAID BLOCK 80; THENCE SOUTH 0° 31' WEST ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 3, 4 AND 5 IN SAID BLOCK 80 AND ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 1, 2, 3, 24, 25 AND 26 IN BLOCK 78 IN SAID SUBDIVISION, 564.2 FEET TO A POINT IN THE SOUTH LINE OF WILSON AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 42' EAST ON SAID SOUTH LINE OF WILSON AVENUE, 366.0 FEET TO THE EAST LINE OF SAID WHEATON ESTATES, RECORDED AS DOCUMENT 197514; THENCE SOUTH 0° 32' WEST ON SAID EAST LINE OF WHEATON ESTATES, 281.25 FEET TO A POINT IN THE NORTH LINE OF HARDING AVENUE, AS DEDICATED IN GLEN ACRES SUBDIVISION (SAID NORTH LINE BEING ALSO THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 23); THENCE SOUTH 89° 42' WEST ON SAID NORTH LINE, 78.85 FEET TO THE POINT OF INTERSECTION OF SAID NORTH LINE WITH THE WEST LINE, IF EXTENDED NORTH, OF LOT 11 IN BLOCK 9 IN GLEN PARK SUBDIVISION, A RESUBDIVISION OF PART OF SAID GLEN ACRES SUBDIVISION; THENCE SOUTH 0° 34' WEST ON SAID WEST LINE OF LOT 11 AND ON THE WEST LINES AND WEST LINES, IF EXTENDED, OF LOTS 18 IN BLOCK 9 AND LOTS 11 AND 18 IN BLOCK 10 AND, LOTS 11 AND 18 IN BLOCK 11, IN SAID GLEN PARK SUBDIVISION AND THE WEST LINE OF LOT 5 IN BLOCK 11 IN SAID GLEN ACRES SUBDIVISION, 1341.91 FEET TO A POINT IN THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 23; THENCE SOUTH 89° 39' WEST ON SAID NORTH LINE OF THE SOUTHWEST QUARTER, 188.0 FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER

OF SAID SOUTHWEST QUARTER; THENCE SOUTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET, TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING THEREFROM LOT 23 IN BLOCK 80 OF SAID WHEATON ESTATES, TOGETHER WITH THE VACATED PORTION OF PERSHING AVENUE SOUTH OF AND ADJOINING SAID LOT 23, ALSO EXCEPTING THEREFROM THAT PART LYING WITHIN "WINCHELL WAY" PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 3

THAT PART OF THE EAST HALF OF SECTION 22, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22 WITH THE EAST LINE, IF EXTENDED, OF LAMBERT ROAD AND RUNNING THENCE NORTHERLY ON THE EAST LINE OF SAID LAMBERT ROAD 3062.2 FEET TO THE NORTH LINE OF WILSON AVENUE; THENCE EASTERLY ON THE NORTH LINE OF SAID WILSON AVENUE 712.88 FEET TO THE EAST LINE OF HILLCREST AVENUE; THENCE SOUTHERLY ON SAID EAST LINE OF HILLCREST AVENUE 3024.63 FEET TO SAID SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 22; THENCE WESTERLY ON SAID SOUTH LINE 982.0 FEET TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS.

EXCEPTING THEREFROM ALL PARCELS ABOVE ANY PARTS TAKEN FOR ROADWAY.

P.I.N.s: 05-23-105-013, 05-23-300-003, 05-23-308-004, 05-23-400-002, 05-22-208-012, 05-22-406-003, 05-22-206-015, 05-23-114-019, 05-23-122-021, 05-23-103-026, 05-23-118-025 and 05-23-126-014; and

Whereas, the conclusion of the 4-month Special Use Permit trial period is approaching and the Village Links/Reserve 22 Department (hereinafter "The Village Links") has requested that the Special Use Permit be extended and the conditions of approval amended; and

Whereas, the Village President and Board of Trustees have considered the request by The Village Links to modify the conditions of approval of the Special Use Permit approved on May 26, 2015 to allow outdoor live entertainment on the subject property and have determined that it is in the best interest of the Village of Glen Ellyn to approve the request.

Now, Therefore, be it Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The Village President and Board of Trustees hereby approve the petitioner's request for amendments to the Special Use Permit for The Village Links granted by Ordinance 6321 to allow outdoor live entertainment at the Village Links/Reserve 22 located on property commonly known as 485 Winchell Way.

Section Two: Section Three of Ordinance 6321 is hereby repealed and replaced in its entirety to read as follows:

"Section Three: This grant of approval of requested Zoning Code Text Amendments, Special Use Permit and Zoning Variation is subject to the following conditions:

- 1. All live entertainment shall be operated in substantial conformance with the plans submitted and the testimony presented at the May 14, 2015 public hearing before the Plan Commission and with the petitioner's application packet including the following plans and documents referenced below, as though they were attached to this Ordinance:*
 - a. Zoning Code Text Amendment application signed April 7, 2015*
 - b. Application for Zoning Variation signed April 7, 2015*
 - c. Application for Special Use Permit signed April 7, 2015*
 - d. Narrative Statement (no date) a copy of which is attached hereto as Exhibit "C"*
 - e. Floor Plan (no date) a copy of which is attached hereto as Exhibit "D"*

and these plans and documents shall be filed with and made part of the permanent records of the Glen Ellyn Planning and Development Department.

- 2. The Special Use Permit approved herein to allow outdoor live entertainment on the property is further conditioned upon the following:*
 - a. That no outdoor live entertainment shall be permitted on any evening past 8:00 pm preceding a regular school day as defined by the local grammar and high school calendars.*
 - b. That outdoor live entertainment shall only be permitted on a Thursday, Friday, or Saturday; provided that no more than six (6) live entertainment events shall be permitted on Friday and Saturday nights during the term of the special use trial period.*
 - c. That all outdoor entertainment shall end by 10:00 pm.*

- d. *That a community council be formed to discuss any issues related to the provision of outdoor live entertainment on the property that may impact the surrounding property owners. At a minimum, the community council shall include a member of The Links staff, a member of the Police Department, one representative from the Raintree neighborhood, one representative from the Parkside Avenue neighborhood and one representative from the Butterfield Manor neighborhood. The community council shall meet a minimum of once a year and, at their discretion, may choose to meet more often. The first meeting of the community council shall occur within 30 days of outdoor live entertainment being provided.*
- e. *That on Thursday evenings, amplification of voice and an acoustic guitar are permitted. On Friday and Saturday evenings, musical instruments and voice shall be only lightly amplified to the extent necessary needed to serve the immediate audience.*
- f. *That the Special Use Permit granted herein shall be valid for a trial period through August 31, 2016, after which the petitioner shall return to the Village Board for further review, at which time the approval may be modified at the full discretion of the Village Board. A courtesy notice to neighbors previously notified of the special use permit public hearing, within 350 feet of the subject property, shall be provided in advance of the Village Board meeting.*
- g. *This Special Use Permit does not preclude the Village Links/Reserve 22 from seeking approval of a Special Event Waiver for additional events which shall be approved by the Village Board."*

Section Three: This Ordinance shall be in full force and effect from and after the passage, approval, and publication in pamphlet form.

Section Four: The Village Clerk is authorized to record this Ordinance with the DuPage County Recorder of Deeds.

Section Five: Failure of the owners or other party in interest or a subsequent owner or other party in interest to comply with the terms of this Ordinance, after execution of such Ordinance, shall subject the owners or party in interest to the penalties set forth in Section 10-10-18(A) and (B) of the Village of Glen Ellyn Zoning Code.

Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois, this 24th day of August, 20 15.

Ayes: Trustees Clark, Elliott, Kenwood, Ladesic, O'Shea and Sena.

Nays: 0

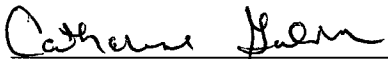
Absent: 0

Abstention: 0

Recusal: 0

Approved by the Village President of the Village of Glen Ellyn, Illinois, this 24th day ofAugust, 2015.Village President of the
Village of Glen Ellyn, Illinois

Attest:

Village Clerk of the
Village of Glen Ellyn, Illinois(Published in pamphlet form and posted on the 25th day of August 2015.)

CERTIFICATION

I, Catherine Galvin, duly elected Village Clerk of the Village of Glen Ellyn, Illinois, do hereby certify that the attached is a true and correct copy of Ordinance No. 6348, passed by the Board of Trustees of the Village of Glen Ellyn, Illinois, at the Board Meeting of said Board held on the 24th day of August 2015, and that the same was signed and approved by the President of said Village on the 24th day of August 2015.

I do further certify that the original, of which the attached is a true and correct copy, is entrusted to me as Village Clerk of said Village for safekeeping and that I am the lawful custodian and keeper of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Village of Glen Ellyn, Illinois, this 24th day of August, 2015.

Catherine Galvin
Village Clerk

CORPORATE SEAL

Village of Glen Ellyn

Ordinance No. ____

**An Ordinance Amending Ordinance 6348 Which Granted Approval of
a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way
to Allow Outdoor Live Entertainment
Glen Ellyn, IL 60137**

**Adopted by the
President and the Board of Trustees
of the Village of Glen Ellyn
DuPage County, Illinois
This ____ Day of _____, 20____.**

Published in pamphlet form by the authority of the
President and Board of Trustees of the Village of
Glen Ellyn, DuPage County, Illinois, this _____
day of _____, 20 ____.

Ordinance No. ____

**An Ordinance Amending Ordinance 6348 Which Granted Approval of
a Special Use Permit
for the Village Links/Reserve 22 Located at 485 Winchell Way
to Allow Outdoor Live Entertainment
Glen Ellyn, IL 60137**

Whereas, on August 25, 2015, the Village President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, adopted Ordinance 6348 which granted approval of a Special Use Permit to allow outdoor live entertainment at the Village Links/Reserve 22 located on property commonly known as 485 Winchell Way; and

Whereas, the aforementioned Special Use Permit was approved subject to a number of conditions one of which granted the approval for a 1-year trial period at which time the request was to be re-evaluated by the Village Board and the Village Board could, at its full discretion and without requiring any further hearings, rescind, extend or modify any of the conditions of approval; and

Whereas, the subject property is zoned CR Conservation Recreation district and is legally described as follows:

PARCEL 1

THAT PART OF SECTION 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION AND RUNNING THENCE NORTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET TO THE NORTHWEST CORNER OF SAID QUARTER; THENCE NORTH 89° 39' EAST ON THE NORTH LINE OF SAID SOUTHWEST QUARTER AND ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION, 1568.98 FEET TO THE CENTERLINE OF PARK BOULEVARD; THENCE SOUTH 4° 05' WEST ON SAID CENTERLINE, 173.97 FEET; THENCE SOUTH 53° 11' WEST, 1955.56 FEET TO THE PLACE OF BEGINNING, IN THE TOWNSHIP OF MILTON, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING THEREFROM THAT PART LYING WITHIN "WINCHELL WAY" PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 2

THAT PART OF SECTIONS 22 AND 23, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE SOUTHEAST CORNER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 23 AND RUNNING THENCE SOUTH 89° 36' WEST ON THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, 1344.28 FEET; THENCE SOUTH 89° 00' WEST ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22, 333.40 FEET TO THE CENTER LINE OF HILLCREST AVENUE, AS DEDICATED 66.0 FEET WIDE IN THE PLAT OF WHEATON ESTATES AS RECORDED AUGUST 7, 1925 AS DOCUMENT 197514 AND 197515; THENCE NORTH 0° 30' EAST ALONG SAID CENTER LINE, 3024.63 FEET TO THE NORTH LINE OF WILSON AVENUE, IF EXTENDED, IN SAID WHEATON ESTATES; THENCE SOUTH 89° 25' WEST ON SAID NORTH LINE OF WILSON AVENUE, 679.88 FEET TO THE EAST LINE OF LAMBERT ROAD AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 0° 3' EAST ON SAID EAST LINE OF LAMBERT ROAD, 300.0 FEET; THENCE NORTH 0° 31' WEST ON SAID EAST LINE, 66.0 FEET; THENCE NORTH 0° 17' EAST ON SAID EAST LINE, 265.0 FEET TO THE SOUTH LINE OF TAFT AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 25' EAST ON SAID SOUTH LINE OF TAFT AVENUE, 829.03 FEET TO THE NORTHWEST CORNER OF LOT 15 IN BLOCK 79 IN SAID SUBDIVISION; THENCE SOUTH 0° 30' WEST, 132.0 FEET TO THE SOUTHWEST CORNER OF SAID LOT 15; THENCE NORTH 89° 26' EAST ON THE SOUTH LINE, IF EXTENDED, OF LOT 15 TO LOT 1, BOTH INCLUSIVE, AND SOUTH LINE AND SOUTH LINE, IF EXTENDED, OF LOTS 14 TO LOT 6, BOTH INCLUSIVE, IN BLOCK 80 IN SAID SUBDIVISION, TO A POINT IN THE WEST LINE OF LOT 3 IN SAID BLOCK 80; THENCE SOUTH 0° 31' WEST ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 3, 4 AND 5 IN SAID BLOCK 80 AND ON THE WEST LINE AND WEST LINE, IF EXTENDED, OF LOTS 1, 2, 3, 24, 25 AND 26 IN BLOCK 78 IN SAID SUBDIVISION, 564.2 FEET TO A POINT IN THE SOUTH LINE OF WILSON AVENUE, AS DEDICATED IN SAID SUBDIVISION; THENCE NORTH 89° 42' EAST ON SAID SOUTH LINE OF WILSON AVENUE, 366.0 FEET TO THE EAST LINE OF SAID WHEATON ESTATES, RECORDED AS DOCUMENT 197514; THENCE SOUTH 0° 32' WEST ON SAID EAST LINE OF WHEATON ESTATES, 281.25 FEET TO A POINT IN THE NORTH LINE OF HARDING AVENUE, AS DEDICATED IN GLEN ACRES SUBDIVISION (SAID NORTH LINE BEING ALSO THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 23); THENCE SOUTH 89° 42' WEST ON SAID NORTH LINE, 78.85 FEET TO THE POINT OF INTERSECTION OF SAID NORTH LINE WITH THE WEST LINE, IF EXTENDED NORTH, OF LOT 11 IN BLOCK 9 IN GLEN PARK SUBDIVISION, A RESUBDIVISION OF PART OF SAID GLEN ACRES SUBDIVISION; THENCE SOUTH 0° 34' WEST ON SAID WEST LINE OF LOT 11 AND ON THE WEST LINES AND WEST LINES, IF EXTENDED, OF LOTS 18 IN BLOCK 9 AND LOTS 11 AND 18 IN BLOCK 10 AND, LOTS 11 AND 18 IN BLOCK 11, IN SAID GLEN PARK SUBDIVISION AND THE WEST LINE OF LOT 5 IN BLOCK 11 IN SAID GLEN ACRES SUBDIVISION, 1341.91 FEET TO A POINT IN THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 23; THENCE SOUTH 89° 39' WEST ON SAID NORTH LINE OF THE SOUTHWEST QUARTER, 188.0 FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SOUTHWEST QUARTER; THENCE SOUTH 0° 24' EAST ON THE WEST LINE OF SAID NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, 1335.70 FEET, TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, IN DUPAGE COUNTY,

ILLINOIS, EXCEPTING THEREFROM LOT 23 IN BLOCK 80 OF SAID WHEATON ESTATES, TOGETHER WITH THE VACATED PORTION OF PERSHING AVENUE SOUTH OF AND ADJOINING SAID LOT 23, ALSO EXCEPTING THEREFROM THAT PART LYING WITHIN “WINCHELL WAY” PER DEDICATION ORDINANCE NO. 1480 RECORDED AS DOCUMENT NO. R66-31654.

TOGETHER WITH

PARCEL 3

THAT PART OF THE EAST HALF OF SECTION 22, TOWNSHIP 39 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED BY BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 22 WITH THE EAST LINE, IF EXTENDED, OF LAMBERT ROAD AND RUNNING THENCE NORTHERLY ON THE EAST LINE OF SAID LAMBERT ROAD 3062.2 FEET TO THE NORTH LINE OF WILSON AVENUE; THENCE EASTERLY ON THE NORTH LINE OF SAID WILSON AVENUE 712.88 FEET TO THE EAST LINE OF HILLCREST AVENUE; THENCE SOUTHERLY ON SAID EAST LINE OF HILLCREST AVENUE 3024.63 FEET TO SAID SOUTH LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 22; THENCE WESTERLY ON SAID SOUTH LINE 982.0 FEET TO THE PLACE OF BEGINNING, IN THE VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS.

EXCEPTING THEREFROM ALL PARCELS ABOVE ANY PARTS TAKEN FOR ROADWAY.

P.I.N.s: 05-23-105-013, 05-23-300-003, 05-23-308-004, 05-23-400-002, 05-22-208-012, 05-22-406-003, 05-22-206-015, 05-23-114-019, 05-23-122-021, 05-23-103-026, 05-23-118-025 and 05-23-126-014; and

Whereas, the conclusion of the 1-year Special Use Permit trial period has occurred and the Village Links/Reserve 22 Department (hereinafter “The Village Links”) has requested that the Special Use Permit be extended and the conditions of approval amended; and

Whereas, the Village President and Board of Trustees have considered the request by The Village Links to modify the conditions of approval of the Special Use Permit approved on August 25, 2015 to allow outdoor live entertainment on the subject property and have determined that it is in the best interest of the Village of Glen Ellyn to approve the request.

Now, Therefore, be it Ordained by the President and Board of Trustees of the Village of Glen Ellyn, DuPage County, Illinois, in the exercise of its home rule powers, as follows:

Section One: The Village President and Board of Trustees hereby approve the petitioner's request for amendments to the Special Use Permit for The Village Links granted by Ordinance 6348 to allow outdoor live entertainment at the Village Links/Reserve 22 located on property commonly known as 485 Winchell Way.

Section Two: Section Three of Ordinance 6348 is hereby repealed and replaced in its entirety to read as follows:

“Section Three: *This grant of approval of requested Zoning Code Text Amendments, Special Use Permit and Zoning Variation is subject to the following conditions:*

1. *All live entertainment shall be operated in substantial conformance with the plans submitted and the testimony presented at the May 14, 2015 public hearing before the Plan Commission and with the petitioner's application packet including the following plans and documents referenced below, as though they were attached to this Ordinance:*

- a. *Zoning Code Text Amendment application signed April 7, 2015*
- b. *Application for Zoning Variation signed April 7, 2015*
- c. *Application for Special Use Permit signed April 7, 2015*
- d. *Narrative Statement (no date) a copy of which is attached hereto as Exhibit “C”*
- e. *Floor Plan (no date) a copy of which is attached hereto as Exhibit “D”*

and these plans and documents shall be filed with and made part of the permanent records of the Glen Ellyn Planning and Development Department.

2. *The Special Use Permit approved herein to allow outdoor live entertainment on the property is further conditioned upon the following:*
 - a. *That no outdoor live entertainment shall be permitted on any evening past 8:00 pm preceding a regular school day as defined by the local grammar and high school calendars.*
 - b. *That all outdoor entertainment shall end by 10:00 pm.*
 - c. *That a community council continue to meet annually to discuss any issues related to the provision of outdoor live entertainment on the property that may impact the surrounding property owners. At a minimum, the community council shall include a member of The Links staff, a member of the Police Department, one representative from the Raintree neighborhood, one representative from the Parkside Avenue neighborhood and one representative from the Butterfield Manor neighborhood. The community council shall meet a minimum of once a year and, at their discretion, may choose to meet more often.*

The first meeting of the community council for the upcoming year shall occur within 30 days of outdoor live entertainment being provided.

- d. That musical instruments and voice shall be only lightly amplified to the extent needed to serve the immediate audience.*
- e. This Special Use Permit does not preclude the Village Links/Reserve 22 from seeking approval of a Special Event Waiver for additional events which shall be approved by the Village Board.”*

Section Four: This Ordinance shall be in full force and effect from and after the passage, approval, and publication in pamphlet form.

Section Five: The Village Clerk is authorized to record this Ordinance with the DuPage County Recorder of Deeds.

Section Six: Failure of the owners or other party in interest or a subsequent owner or other party in interest to comply with the terms of this Ordinance, after execution of such Ordinance, shall subject the owners or party in interest to the penalties set forth in Section 10-10-18(A) and (B) of the Village of Glen Ellyn Zoning Code.

Passed by the President and Board of Trustees of the Village of Glen Ellyn, Illinois, this _____ day of _____, 20 _____.

Ayes:

Nays:

Absent:

Abstention:

Recusal:

Approved by the Village President of the Village of Glen Ellyn, Illinois, this _____ day of _____, 20____.

Village President of the
Village of Glen Ellyn, Illinois

Attest:

Village Clerk of the
Village of Glen Ellyn, Illinois

(Published in pamphlet form and posted on the ____ day of _____.)

Financial Effects of Outdoor Live Entertainment at Reserve 22

Period Measured: May - August 2016 - 6:00pm - 11:00pm

2016

Thursdays

Thursdays					Weather Conditions			Avg Guests	
Date	Sales	Guests	Avg/Guest	Performer	High	Low	Precip.	Avg Sales	
19-May	\$5,896	180	\$32.76	Diet Soda	70	38		167 \$5,866	52% higher 55% higher
2-Jun	\$6,130	172	\$35.64	Jim Perona	79	54			
23-Jun	\$5,807	165	\$35.20	John Kattke	80	60			
30-Jun	\$5,061	136	\$37.21	Ken Slauf	77	55			
14-Jul	\$6,437	184	\$34.98	Paolo Apuli	87	67			
4-Aug	\$6,057	145	\$41.77	none	89	67	0.09	110 \$3,795	
16-Jun	\$4,614	152	\$30.36	none	76	61			
26-May	\$4,399	122	\$36.06	none	84	64			
11-Aug	\$3,702	109	\$33.96	none	92	70			
9-Jun	\$3,235	106	\$30.52	none	70	53	0.14		
7-Jul	\$3,023	86	\$35.15	none	73	66	0.85		
21-Jul	\$2,785	85	\$32.76	none	87	66			
28-Jul	\$2,547	75	\$33.95	none	86	67	0.61		

Fridays

Fridays					Weather Conditions			Avg Guests	
Date	Sales	Guests	Avg/Guest	Performer	High	Low	Precip.	Avg Sales	
3-Jun	\$10,533	198	\$53.20	HOOU(omitt	83	53		216 \$8,805	57% higher
10-Jun	\$8,621	218	\$39.54	Ken Slauf	91	61			40% higher
1-Jul	\$9,964	223	\$44.68	Tommy Pop	75	54			
24-Jun	\$7,831	208	\$37.65	Tommy Pop	84	58			
17-Jun	\$8,484	237	\$35.80	none	84	57			
8-Jul	\$7,859	184	\$42.71	none	85	66		138 \$6,307	
5-Aug	\$6,624	129	\$51.35	none	83	63			
27-May	\$6,091	133	\$45.79	none	82	67			
22-Jul	\$5,836	139	\$41.98	none	89	70	0.01		
15-Jul	\$5,228	161	\$32.47	none	75	58	0.04		
20-May	\$5,150	126	\$40.87	none	68	44			
12-Aug	\$3,663	67	\$54.67	none	82	74	0.3		
29-Jul	\$2,676	67	\$39.94	none	83	67	0.53		

Saturdays

Saturdays					Weather Conditions			Avg Guests	
Date	Sales	Guests	Avg/Guest	Performer	High	Low	Precip.	Avg Sales	
6-Aug	\$6,761	132	\$51.22	Contra Band	83	63		131	19% higher
18-Jun	\$5,981	132	\$45.31	Crook Count	87	56			
4-Jun	\$4,760	76	\$62.63	HOOU(omitt	72	61		\$6,262	27% higher
23-Jul	\$6,045	130	\$46.50	Kevin Purce	90	71	1.25		
9-Jul	\$6,153	131	\$46.97	none	81	62		110	
21-May	\$6,003	165	\$36.38	none	76	50			
16-Jul	\$5,898	141	\$41.83	none	79	53			
28-May	\$5,483	110	\$49.84	none	83	65	0.1		
11-Jun	\$5,012	100	\$50.12	none	91	67			
25-Jun	\$4,479	97	\$46.18	none	88	63			
13-Aug	\$3,914	99	\$39.53	none	84	68			
30-Jul	\$3,909	103	\$37.95	none	79	65			
2-Jul	\$3,539	82	\$43.16	none	75	52			



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 09/19/16 06:30 PM
Department: Public Works
Department Head: Caroline Conlon
Category: Discussion Item
Prepared By: Rich Daubert

SCHEDULED

AGENDA ITEM (ID # 2420)

DOC ID: 2420

Senior Engineer Rich Daubert will discuss the Park Boulevard/Main Street Projects additional Phase I engineering expenses & Phase II engineering services.

Background

On May 14, 2012, the Village Board authorized an agreement in the amount of \$125,000 (\$116,173 base agreement plus \$8,827 in contingency funding) with Engineering Enterprises, Incorporated (EEI) for the completion of Phase I Engineering Services for the rehabilitation of Park Boulevard from Roosevelt Road to the Union Pacific Railroad Tracks.

Subject

As EEI worked through the Phase I agreement, the Village was simultaneously reviewing ways to improve pedestrian, bicycle, and vehicular traffic. While the work was not included within the original agreement for Phase I services, the Village directed EEI to evaluate and apply for funding for potential bicycle accommodations along Park Boulevard as it would serve as a logical north/south bicycle route.

More specifically, the analysis for bicycle accommodations entailed developing and evaluating various alternatives for widening Park Boulevard to accommodate bike lanes. EEI also applied for Surface Transportation Funding (STP) funding for the bicycle accommodations through the DuPage Mayors and Managers Conference.

The bicycle accommodation considerations began in early 2014 and culminated with the August 2015 STP grant calling. It was during this timeframe that only nominal work was performed on the project; Village staff was also concentrating heavily on several major roadway projects at this time including the Crescent Boulevard Reconstruction Project. Upon determination that the Village was not successful in acquiring grant funding for the bicycle accommodations, EEI was directed to resume Phase I services in early 2016.

EEI then indicated to the Village that the original Phase I agreement, excluding the contingency, in the amount of \$116,173 was expended. It was indicated that the additional bicycle accommodation work and delay in the project will require approximately \$40,000 in contingency funding to complete Phase I Engineering for the project.

Of this \$40,000, EEI attributes \$12,000 of additional expenses due to the bicycle accommodation work and the balance due to increased personnel costs and having to re-complete the Preliminary Environmental Site Assessment and Vehicle Crash Analysis as this information has expired due to the extended schedule of the Phase I work. In regards to the schedule, EEI anticipated that Phase I would have been completed in 18-24 months whereas we are now past the 4 year mark.

EEI has requested that the Village consider making the \$8,827 contingency available to continue

work on the project and retaining EEI for Phase II Engineering. In return, EEI would complete Phase I services and absorb the additional \$31,173 in Phase I expenses.

In response, staff directed EEI to provide a proposal for the completion of Phase II Engineering Services for the Rehabilitation of Park Boulevard. In addition, staff directed EEI to provide a proposal for completing Phase I and Phase II Engineering for the resurfacing of Main Street between Roosevelt and Fairview. Due to proximity and scope, staff feels that the Park and Main Street projects should be bid and constructed together. The projects would be timed to avoid simultaneous adverse impacts on the public.

EEI provided a proposal dated August 15th in the total fixed fee amount of \$289,615. Staff requested additional information and met with EEI on August 25th to discuss the proposal. While staff felt the proposal was reasonable; EEI was asked to re-evaluate certain costs, specifically with respect to design work associated with drainage and water main improvements.

EEI provided a revised proposal with reduced costs in the aforementioned areas resulting in a total fixed fee of \$269,695. A tabular summary of the original and revised proposals is as follows:

Proposal	Park Boulevard Phase II Engineering	Main Street Phase I & II Engineering	Total Proposal Cost
#1 - Original Proposal (8/15/2016)	\$261,451	\$28,164	\$289,615
#2 - Revised Proposal (9/1/2016)	\$241,531	\$28,164	\$269,695

While the specific elements and scope of a project drive engineering costs, it is reasonable to estimate that Phase II Engineering for this type of project involving roadway reconstruction and resurfacing, moderately involved utility work, and IDOT/federal funding requirements will amount to approximately 10% of the estimated cost of construction.

The current estimated cost of construction, as prepared by EEI, for the rehabilitation of Park Boulevard is \$2,650,000. The estimated cost of construction for the resurfacing of Main Street was \$285,000 at the time of the STP Funding Application. Staff feels these construction estimates, while preliminary and subject to adjustment as design proceeds, are conservative and represent the floor, not the ceiling, of the actual project costs. As such, reasonable estimates for Phase II Engineering for Main and Park are respectively \$265,000 and \$28,500, or a total of \$293,500.

Summary

- ☐ EEI has expended the full amount of the Phase I Engineering Agreement and contingency funding beyond the Board Authorized Amount is required to complete Phase I Engineering.
- ☐ Selecting EEI for Phase II Engineering would allow for containing the additional cost of Completing Phase I Engineering (\$31,173).
- ☐ EEI's proposal for Phase II Engineering is within 10% of conservative estimated costs of

construction (\$293,500) and within the amount provided in the CY16 Budget.

- ☐ EEI reduced its proposal for Phase II Engineering based on feedback from staff (\$19,920).
- ☐ Staff's experience in working with EEI is positive and staff feels that EEI is well qualified to complete Phase II Engineering.

Action Requested

Staff requests a discussion with the Village Board to review the aforementioned items and obtain direction in as how to proceed with the completion of Phase I and Phase II Engineering for the Park Boulevard/Main Street Projects.

Attachments

EEI Original Proposal (8/15/2016)

EEI Revised Proposal (9/1/2016)

ATTACHMENTS:

- EEI Original Proposal 8-15-2016 (PDF)
- EEI Revised Proposal 9-1-2016 (PDF)



Engineering Enterprises, Inc.

ATTACHMENT A
ESTIMATED OF LEVEL OF EFFORT AND ASSOCIATED COST
PROFESSIONAL ENGINEERING SERVICES - PHASE II ENGINEERING
 PARK BOULEVARD PHASE II - CRESCENT BLVD. TO IL ROUTE 38 (ROOSEVELT ROAD)
 VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS



WORK ITEM NO.	WORK ITEM	ENTITY:	ENGINEERING				SURVEYING			DRAFTING		ADMIN.	WORK ITEM HOUR SUMM.	COST PER ITEM	
		PROJECT ROLE:	PRINCIPAL IN CHARGE	PROJECT MANAGER	SENIOR PROJECT ENGINEER II	PROJECT ENGINEER	PROJECT MANAGER	SENIOR PROJECT SURVEYOR II	SENIOR PROJECT TECHNICIAN II	CAD MANAGER	SENIOR PROJECT TECHNICIAN I	ADMIN.			
			HOURLY RATE:	\$185	\$163	\$150	\$129	\$163	\$141	\$141	\$163	\$129			\$80
PHASE II															
2.1	GENERAL PLANS - NOTES, TYPICAL SECTIONS, ETC.			4	40	10					40		94	\$	13,102
2.2	ROADWAY PLAN AND PROFILE			8	48	40					92		188	\$	25,532
2.3	ROADWAY PLAN VIEW			4	24	24					48		100	\$	13,540
2.4	STAGING AND DETOUR PLAN			4	16	16					24		60	\$	8,212
2.5	EROSION CONTROL AND SWPPP			4	16						16		36	\$	5,116
2.6	DRAINAGE DESIGN			48		48					28		124	\$	17,628
2.7	STORM SEWER PLAN AND PROFILE			24	16	40					72		152	\$	20,760
2.8	WATER MAIN PLAN AND PROFILE			4	32	24					64		124	\$	16,804
2.9	SANITARY SEWER REPAIR PLAN AND PROFILE/DETAILS			2	4	24					32		62	\$	8,150
2.10	INTERSECTION DETAILS			4	16	16					24		60	\$	8,212
2.11	LANDSCAPING, SIGNAGE, PAVEMENT MARKINGS			4		16					16		36	\$	4,780
2.12	TRAFFIC SIGNAL MODIFICATION DETAILS			4	16						16		36	\$	5,116
2.13	DETAILS AND STANDARDS			2	4	6					16		28	\$	3,764
2.14	CROSS SECTIONS			4	24	24					48		100	\$	13,540
2.15	SPECIFICATIONS			8	40	16							64	\$	9,368
2.16	PERMITTING			4	24						8		36	\$	5,284
2.17	QUANTITIES AND ESTIMATES OF COST			4	60	40					16		120	\$	16,876
2.18	PRINTING/TYPING/ASSEMBLY										8	16	24	\$	2,312
2.19	QUALITY CONTROL/QUALITY ASSURANCE		8	24									32	\$	5,392
2.20	DISPOSITIONS AND REVISIONS			8	16						16		40	\$	5,768
2.21	MEETINGS		16	16	24								56	\$	9,168
2.22	LAND ACQUISITION COORDINATION		2	8	4								14	\$	2,274
2.23	PROJECT MANAGEMENT AND ADMINISTRATION		24	80									104	\$	17,480
													-	\$	-
SUB TOTAL			50	272	424	344	-	-	-	-	584	16	1,690	\$	238,478
LAND ACQUISITION SERVICES															
7.1	PLAT OF HIGHWAYS AND LEGAL DESCRIPTIONS						4	15	16				35	\$	5,023
													-	\$	-
SUB TOTAL			-	-	-	-	4	15	16	-	-	-	35	\$	5,023
PROJECT TOTAL:			50	272	424	344	4	15	16	-	584	16	1,725	\$	243,201

DIRECT EXPENSES	
Title Commitments =	\$ 1,000
Updated Titles and Recording =	\$ 500
Appraisals / Review Appraisals / Negotiations (TBD) =	\$ 6,000
PSI (Huff & Huff) =	\$ 9,900
Printing =	\$ 850
DIRECT EXPENSES =	\$ 18,250

LABOR SUMMARY	
Engineering Expenses =	\$ 161,562
Surveying Expenses =	\$ 5,023
Drafting Expenses =	\$ 75,336
Administrative Expenses =	\$ 1,280
TOTAL LABOR EXPENSES =	\$ 243,201
TOTAL EXPENSES =	\$ 261,451



ATTACHMENT B
ESTIMATED OF LEVEL OF EFFORT AND ASSOCIATED COST
PROFESSIONAL ENGINEERING SERVICES - PHASE I AND II ENGINEERING
 MAIN STREET LAFO - PHASES I AND II - HILL AVE. TO IL ROUTE 38 (ROOSEVELT ROAD)
 VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS



WORK ITEM NO.	WORK ITEM	ENTITY:		ENGINEERING				SURVEYING			DRAFTING		ADMIN.	WORK ITEM HOUR SUMM.	COST PER ITEM
		PROJECT ROLE:	PRINCIPAL IN CHARGE	PROJECT MANAGER	SENIOR PROJECT ENGINEER II	PROJECT ENGINEER	PROJECT MANAGER	SENIOR PROJECT SURVEYOR II	SENIOR PROJECT TECHNICIAN II	CAD MANAGER	SENIOR PROJECT TECHNICIAN	ADMIN.			
			HOURLY RATE:	\$185	\$163	\$150	\$129	\$163	\$141	\$141	\$163		\$129		
PHASE I AND PHASE II															
1.1	FIELD REVIEW/CONFIRM CONDITIONS			2	8									10	\$ 1,526
1.2	REVIEW EXISTING PAVEMENT DATA			2	2									4	\$ 626
1.3	PREPARE AND SUBMIT PHASE I INFORMATION TO IDOT			4	8							16		28	\$ 3,916
* 2.1	PREPARE PLANS & SPECS IN ACCORDANCE WITH LAFO GUIDELINES			2	32							32		66	\$ 9,254
* 2.2	INTERNAL QC/QA OF PLANS AND SPECS		2	4										6	\$ 1,022
2.3	REVISIONS AND DISPOSITION OF COMMENTS			2	2							4		8	\$ 1,142
* 2.4	SUBMIT FINAL PLANS, SPECIFICATIONS AND ESTIMATES			2	4									6	\$ 926
* 2.5	IDOT PROCESSING - LOCAL AGENCY AGREEMENT, CONSTRUCTION ENGINEERING, PPI			2	2									4	\$ 626
2.6	PROJECT MANAGEMENT AND ADMINISTRATION		2	12										14	\$ 2,326
PROJECT TOTAL:			4	32	58	-	-	-	-	-	-	52	-	146	\$ 21,364

* PHASE II ENGINEERING ESTIMATE ASSUMES MILL STREET LAFO PLANS WILL BE IN COMBINATION WITH PARK BOULEVARD PLANS.

DIRECT EXPENSES	
PSI (Huff & Huff) =	\$ 6,800
DIRECT EXPENSES =	\$ 6,800

LABOR SUMMARY	
Engineering Expenses =	\$ 14,656
Surveying Expenses =	\$ -
Drafting Expenses =	\$ 6,708
Administrative Expenses =	\$ -
TOTAL LABOR EXPENSES =	\$ 21,364
TOTAL EXPENSES =	\$ 28,164



ATTACHMENT A
ESTIMATED OF LEVEL OF EFFORT AND ASSOCIATED COST
PROFESSIONAL ENGINEERING SERVICES - PHASE II ENGINEERING
 PARK BOULEVARD PHASE II - CRESCENT BLVD. TO IL ROUTE 38 (ROOSEVELT ROAD)
 VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS



WORK ITEM NO.	WORK ITEM	ENTITY:	ENGINEERING				SURVEYING			DRAFTING		ADMIN.	WORK ITEM HOUR SUMM.	COST PER ITEM
		PROJECT ROLE:	PRINCIPAL IN CHARGE	PROJECT MANAGER	SENIOR PROJECT ENGINEER II	PROJECT ENGINEER	PROJECT MANAGER	SENIOR PROJECT SURVEYOR II	SENIOR PROJECT TECHNICIAN II	CAD MANAGER	SENIOR PROJECT TECHNICIAN I	ADMIN.		
		HOURLY RATE:	\$185	\$163	\$150	\$129	\$163	\$141	\$141	\$163	\$129	\$80		
PHASE II														
2.1	GENERAL PLANS - NOTES, TYPICAL SECTIONS, ETC.			4	40	10					40		94	\$ 13,102
2.2	ROADWAY PLAN AND PROFILE			8	48	40					92		188	\$ 25,532
2.3	ROADWAY PLAN VIEW			4	24	24					48		100	\$ 13,540
2.4	STAGING AND DETOUR PLAN			4	16	16					24		60	\$ 8,212
2.5	EROSION CONTROL AND SWPPP			4	16						16		36	\$ 5,116
2.6	DRAINAGE DESIGN			8		40					16		64	\$ 8,528
2.7	STORM SEWER PLAN AND PROFILE			4	16	24					40		84	\$ 11,308
2.8	WATER MAIN PLAN AND PROFILE			4	16	32					64		116	\$ 15,436
2.9	SANITARY SEWER REPAIR PLAN AND PROFILE/DETAILS			2	4	24					32		62	\$ 8,150
2.10	INTERSECTION DETAILS			4	16	16					24		60	\$ 8,212
2.11	LANDSCAPING, SIGNAGE, PAVEMENT MARKINGS			4		16					16		36	\$ 4,780
2.12	TRAFFIC SIGNAL MODIFICATION DETAILS			4	16						16		36	\$ 5,116
2.13	DETAILS AND STANDARDS			2	4	6					16		28	\$ 3,764
2.14	CROSS SECTIONS			4	24	24					48		100	\$ 13,540
2.15	SPECIFICATIONS			8	40	16							64	\$ 9,368
2.16	PERMITTING			4	24						8		36	\$ 5,284
2.17	QUANTITIES AND ESTIMATES OF COST			4	60	40					16		120	\$ 16,876
2.18	PRINTING/TYPING/ASSEMBLY										8	16	24	\$ 2,312
2.19	QUALITY CONTROL/QUALITY ASSURANCE		8	24									32	\$ 5,392
2.20	DISPOSITIONS AND REVISIONS			8	16						16		40	\$ 5,768
2.21	MEETINGS		16	16	24								56	\$ 9,168
2.22	LAND ACQUISITION COORDINATION		2	8	4								14	\$ 2,274
2.23	PROJECT MANAGEMENT AND ADMINISTRATION		24	80									104	\$ 17,480
													-	\$ -
SUB TOTAL			50	212	408	328	-	-	-	-	540	16	1,554	\$ 218,258
LAND ACQUISITION SERVICES														
7.1	PLAT OF HIGHWAYS AND LEGAL DESCRIPTIONS						4	15	16				35	\$ 5,023
													-	\$ -
SUB TOTAL			-	-	-	-	4	15	16	-	-	-	35	\$ 5,023
PROJECT TOTAL:			50	212	408	328	4	15	16	-	540	16	1,589	\$ 223,281

DIRECT EXPENSES		
Title Commitments =	\$	1,000
Updated Titles and Recording =	\$	500
Appraisals / Review Appraisals / Negotiations (TBD) =	\$	6,000
PSI (Huff & Huff) =	\$	9,900
Printing =	\$	850
DIRECT EXPENSES =	\$	18,250

LABOR SUMMARY		
Engineering Expenses =	\$	147,318
Surveying Expenses =	\$	5,023
Drafting Expenses =	\$	69,660
Administrative Expenses =	\$	1,280
TOTAL LABOR EXPENSES =	\$	223,281
TOTAL EXPENSES =	\$	241,531



ATTACHMENT B
ESTIMATED OF LEVEL OF EFFORT AND ASSOCIATED COST
PROFESSIONAL ENGINEERING SERVICES - PHASE I AND II ENGINEERING
MAIN STREET LAFO - PHASES I AND II - HILL AVE. TO IL ROUTE 38 (ROOSEVELT ROAD)
VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS



WORK ITEM NO.	WORK ITEM	ENTITY:	ENGINEERING				SURVEYING			DRAFTING		ADMIN.	WORK ITEM HOUR SUMM.	COST PER ITEM	
		PROJECT ROLE:	PRINCIPAL IN CHARGE	PROJECT MANAGER	SENIOR PROJECT ENGINEER II	PROJECT ENGINEER	PROJECT MANAGER	SENIOR PROJECT SURVEYOR II	SENIOR PROJECT TECHNICIAN II	CAD MANAGER	SENIOR PROJECT TECHNICIAN	ADMIN.			
		HOURLY RATE:	\$185	\$163	\$150	\$129	\$163	\$141	\$141	\$163	\$129	\$80			
PHASE I AND PHASE II															
1.1	FIELD REVIEW/CONFIRM CONDITIONS			2	8								10	\$ 1,526	
1.2	REVIEW EXISTING PAVEMENT DATA			2	2								4	\$ 626	
1.3	PREPARE AND SUBMIT PHASE I INFORMATION TO IDOT			4	8						16		28	\$ 3,916	
* 2.1	PREPARE PLANS & SPECS IN ACCORDANCE WITH LAFO GUIDELINES			2	32						32		66	\$ 9,254	
* 2.2	INTERNAL QC/QA OF PLANS AND SPECS		2	4									6	\$ 1,022	
* 2.3	REVISIONS AND DISPOSITION OF COMMENTS			2	2						4		8	\$ 1,142	
* 2.4	SUBMIT FINAL PLANS, SPECIFICATIONS AND ESTIMATES			2	4								6	\$ 926	
* 2.5	IDOT PROCESSING - LOCAL AGENCY AGREEMENT, CONSTRUCTION ENGINEERING, PPI			2	2								4	\$ 626	
2.6	PROJECT MANAGEMENT AND ADMINISTRATION		2	12									14	\$ 2,326	
PROJECT TOTAL:				4	32	58	-	-	-	-	-	52	-	146	\$ 21,364

* PHASE II ENGINEERING ESTIMATE ASSUMES MILL STREET LAFO PLANS WILL BE IN COMBINATION WITH PARK BOULEVARD PLANS.

DIRECT EXPENSES	
PSI (Huff & Huff) =	\$ 6,800
DIRECT EXPENSES =	\$ 6,800

LABOR SUMMARY	
Engineering Expenses =	\$ 14,656
Surveying Expenses =	\$ -
Drafting Expenses =	\$ 6,708
Administrative Expenses =	\$ -
TOTAL LABOR EXPENSES =	\$ 21,364

TOTAL EXPENSES =	\$ 28,164
------------------	-----------



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 09/19/16 06:30 PM
Department: Administration
Department Head: Al Stonitsch
Category: Special Event
Prepared By: Brendon Mendoza

SCHEDULED

AGENDA ITEM (ID # 2419)

DOC ID: 2419

Assistant Village Manager Al Stonitsch and Administrative Intern Brendon Mendoza will provide information regarding the Special Event Policy update and Commercial Filming Permits.

Background

From time to time, the Village Board reviews and considers potential updates to the Village's Special Event Permit policies. The last Board amendment to the Village's special event policy occurred in April 2013. The purpose of this memo is update the Board on the Village's current fees and permit process, and obtain feedback from the Board on whether it would like staff to evaluate any potential amendments to the Village's special event permit policy. To that end, the main policy questions for the Board include:

I. Special Events Permit:

1. Does the Board wish to keep the permit fee at \$35?
2. Does the Board wish to maintain the Village's historical policy of not charging back "grandfathered" events for additional direct costs (i.e. Police and Public Works overtime) incurred by the Village?
3. Does the Board wish to continue to charge permit fees to sister jurisdictions?
4. Should the Village adopt a deposit fee?

II. Commercial Filming Events:

1. Should the Village adopt a separate Film Permit policy and application fee?
2. If so, should the Village charge additional fees for street closure requests?
2. Does the Board wish to limit the number of filming permits issued per location?

I. Special Event Permits

Current Permit Requirements/Review Process:

As part of the special event permit process, applicants must complete and submit the permit application at least 60 business days before the event. Applicants must also submit a \$35.00 processing fee and provide a Certificate of Insurance naming the Village of Glen Ellyn as additionally insured. Annual (repeat) special events do not require Village Board approval and are sent to Village staff for administrative review. Unless there are material changes to the scope of the event, the permit is administratively approved by the Village Manager. Following staff review from all departments, the Village issues an approval letter to the event organizer, with any applicable conditions. New, first-time events require Village Board approval, which is then followed by an approval letter outlining any additional required permits, such as: tent permits, DuPage County Health Department permits, State of Illinois Liquor Licenses, etc.

The following chart summarizes the number of special event permits issued over the last three years:

Year	# of Permits Issued
*2013	31
*2014	40
2015	53
2016 (YTD)	48

*Note: General 5K charity runs and commercial film shoots did not go through the Village's special event permit process prior to mid-2014, and therefore are not represented in the tally.

Attachment #1 outlines the number of permits issued by year, name, and date of the event.

External Stakeholder Feedback of Special Event Policy

As part of staff's review of the Special Event policy, the Village solicited feedback from the Executive Director of the Alliance of Downtown ("the Alliance") Glen Ellyn, Carol White and the Glen Ellyn Chamber of Commerce ("The Chamber") Executive Director, Dawn Smith. The Alliance and Chamber stated that current special event process is effective and both organizations have experienced minimal issues with the current special event policy.

Issues

Special Event Processing Fee

As part of the special event permit process, Village staff has reviewed the processing fee charged for special event permits. Below is a chart displaying the processing fee of comparable communities. The Village of Glen Ellyn charges a flat application fee to event organizers. The \$35.00 fee includes all administrative costs, indirect staff hours (e.g. Police and Public Works) and vehicle/equipment usage, and services provided by the Village during normal business hours. Event organizers are not charged for additional services provided by the Village, with the exception of overtime hours required by Public Works or Police, or any necessary equipment rental costs (e.g. barricades).

The following table summarizes a general sample size of those area communities that charge special event permit fees. The survey data suggests that the Village's special event processing fee of \$35.00 is on the lower side of the spectrum. As such, the Board may wish to consider raising the fee to \$50.00, in order for the Village to recover some of the indirect staff and equipment time associated with processing and preparing for special events. The potential downside of increasing the fee would be the potential adverse effect on the smaller scale charity or non-profit special events that more commonly operate on very small margins.

Municipality	Special Event Application Fee
Kenilworth	\$50.00 - \$150.00
Riverside	\$100.00
Downers Grove	\$86.00

Highland Park	\$60.00
Oak Park	\$50.00
Wheaton	\$50.00
Lombard	\$50.00*
Glen Ellyn	\$35.00
Lisle	\$25.00
Lake Forest	\$25.00
Batavia	Varies
Skokie	No Fee

*\$50.00 per day or \$20.00 per week for seasonal outdoor garden sales

POLICY QUESTION #1: Does the Board wish to increase the Village's Special Event Permit Fee?

Grandfathered Special Events

Specific special events that have been established by Board policy as "grandfathered" events within the Village, are waived of any additional charges beyond the special event application fee, including Public Works & Police staff overtime costs. The following table identifies the eleven (11) events that are considered "grandfathered" events by the Village, and details the actual overtime costs that are incurred by the Village, but are not charged back for the costs.

Grandfathered Special Events

Grandfathered Events	2014		2015		2016	
	Public Works Overtime Costs	Police Overtime Costs	Public Works Overtime Costs	Police Overtime Costs	Public Works Overtime Costs	Police Overtime Costs
1.Glen Ellyn Chamber Halloween Parade	\$92.18	\$250.00	\$259.82	\$250.00	Has not occurred yet	\$250.00
2.Glen Ellyn Chamber Holiday Walk	\$225.14	\$1,400.00 ^	\$819.04	\$1,400.00 ^	Has not occurred yet	\$1,400.00 ^
3.Glen Ellyn Chamber Taste of GE /Fair	**	*	\$964.65	*	\$1,848.75	*
4.Glen Ellyn	**	\$1,000.00	\$650.49	\$1,000.00	\$1,213.29	\$1,000.00

Alliance/Chamber Jazz Up Glen Ellyn / Jazz In Glen Ellyn		^		^		^
5.Alliance & Chamber Sidewalk Sale	**	*	\$340.21	*	\$220.08	*
6.Alliance Sounds on the Street	**	\$825.00	\$622.54	\$825.00	Not calculated at time of memo	\$825.00
7.Glen Ellyn Boat Regatta	*	\$375.00^	*	\$375.00^	*	\$375.00^
8.Bridge Communities Backyard Barbecue	**	\$950.00	\$369.69	\$950.00	Not calculated at time of memo	\$950.00
9.Village Recycling Extravaganza	\$1,500.00	\$250.00	\$1,424.97	\$250.00	\$1,600.00	\$250.00
10.Glenbard West High School Homecoming Parade	**	\$150.00	\$51.68	\$150.00	Has not occurred yet	\$150.00
11. 4 th of July Parade / Fireworks	**	\$3,500.00 ^	\$2,383.40	\$3,500.00 ^	\$2,040.36	\$3,500.00 ^
Total Direct Cost	\$1,817.32* *	\$5,925.00	\$7,886.49	\$5,925.00	\$6,922.48	\$5,925.00

*Standard indirect staff time only; no overtime

** Detail unavailable; event occurred prior to implementation of new expense tracking/asset management software (Cartegraph) in Public Works.

^Expense fluctuates dependent upon hiring of an additional officer for the special event

POLICY QUESTION #2: Does the Board wish to maintain this same list of “grandfathered” events that are exempt from any additional charges by the Village?

Permit Fees Charged to Sister Jurisdictions:

Relatedly, the Village charges the Library, Park District, and School District the \$35 permit fee for their respective special event permit applications.

POLICY QUESTION#3: Does the Board wish to maintain this current policy of charging sister jurisdictions the standard permit fee?

Deposit Fee Policy Consideration

As part of the special event permit, some communities charge a refundable deposit to the event organizers in order to protect the municipality from damage to public property or to offset any time/material costs incurred to make repairs or conduct post-event clean up. Examples include:

☐ **Post-Event Refuse Clean Up**

Special event organizers are required to contract with a refuse hauler in order to request special pick up for refuse during events. In order to assist organizers with garbage control during the event, the Village provides additional 35 gallon residential refuse carts to be used during events at no additional charge. There have been isolated instances, however, where Public Works staff has been required to pick-up and dispose of left over refuse following a special event, resulting in additional indirect costs to the Village.

☐ **Damage to Village Property**

As part of the special event application process, event organizers have the ability to request use of Village-owned property (e.g. sidewalk, streets, parking lots, and parkway). Public Work inspects the property prior to a special event occurring, and coordinates repairs if any damage occurs as a results of the event. A refundable deposit could be used to cover these costs, if necessary.

Charity Runs/Walk/Bike Markings

As of 2015, runs/walks/bike races have been incorporated into the special event application process, and are required to obtain a special event permit application. Village staff has worked with event organizers to test various methods of marking streets for these types of events. Upon testing the different alternatives, a chalk stick has been recommended as the only method allowed for the marking of routes. Despite the Village's policy, there might still be instances where event organizers use spray paint to mark their event course. In these cases, does the Village want to charge back the event organizers for the costs incurred to remove the painted markings from the street or sidewalk? If so, is a deposit the preferred method?

Comparable Survey of Deposit Fees

Municipality	Deposit Amount Charged
Galena	\$200.00
Glenview	\$100.00 - \$500.00 per day*
St. Charles	50% of municipality services expenses
Wauconda	\$50.00 barricade deposit
Wheaton	N/A
Downers Grove	Case by case basis

Lombard	\$500.00 or \$1000.00 [^]
Lisle	N/A
Oak Park	25% of municipality service expenses
Batavia	50% of municipality service expenses

*Deposit fee per day is dependent upon number of anticipated attendance.

[^]Three (3) days or less requires \$500.000 cash bond, three (3) days or more required \$1000.00 cash bond.

Village staff has only encountered a few isolated incidents, where a deposit fee may have been beneficial; however, at this time staff does not see a compelling reason to assess a deposit to organizers at this juncture. Instead, if the need arises, the Village would continue to notify event organizers that any damage to Village property would be billed back to the event. Non-payment instances would result in potentially denying any future permits until satisfactory payment has been made.

POLICY QUESTION #4: Does the Board wish to create a deposit fee for special events?

II. Commercial Filming Permit

Issue

As part of the Special Event Permit policy discussion, staff would also like to engage the Board in a discussion on the implementation of a separate filming permit that would be required of any commercial film production within the community. Over the last couple of years, there have been isolated instances where the Village has received complaints from a homeowner regarding the frequency of commercial film productions that were occurring across from his home. The Revere Road resident was upset about the nuisance that the operation caused to the neighborhood.

In light of the resident complaints discussed earlier, beginning in 2015, staff administratively began to require commercial film companies to obtain a Special Event permit in order to provide some nominal regulation to the process, such as: 1) Appropriate Notice 2) Permit Fee 3) Restrictions on Hours of Operation, and 4) Traffic Safety/Street Closure Coordination, and 5) Neighborhood Notification.

Number of Filming Permits Approved Per Location

In 2015, five (5) total film permits were processed through the special event application process. In 2016, eight (8) total film permits were processed through the special event application process. Four (4) of the filming permits were approved to take place at 781 Revere Road, and two (2) at 420 Ridgewood Avenue. The Village did not receive any formal complaints regarding these particular locations; however, it is staff's understanding that the prior complainant has since moved from the area.

The following chart summarizes the number of filming/photoshoot "special event" permits issued

over the last three years (*Attachment #3*):

Year	# of Permits Issued
2013	0
2014*	1
2015	5
2016 (YTD)	8

*In 2014, filming requests transitioned from the Police Department to Administration, requiring filming organizers to apply for a special event permit, and be formally reviewed through the special event regulations.

Glen Ellyn, however, is an affluent community with a distinctive topography and a rich inventory of architecturally unique homes and buildings. These characteristics tend to make Glen Ellyn a desirable community for location scouts. Communities who similarly tend to attract commercial film production companies have taken steps to provide some level of regulation to these productions by implementing a separate and distinct film permit policy. As such, staff surveyed communities in the area to better understand how they approach the film permit process. Unlike special events, it seems that many communities do not require a film permit for movies or commercial filming. If the Board wishes to further explore a new and separate Film Permit, however, the following are the main policy points for consideration:

A. Permit Requirements

As part of the film permit process, applicants would be required to complete and submit the permit at least ten (10) business days before the start of filming (*Attachment 3*). Applicants must also submit a signed approval letter from the property owner, and provide a Certificate of Insurance naming the Village of Glen Ellyn as additionally insured. If the filming is set to occur in a residential area, applicants are required to notify all impacted homeowners on their block. If filming will require a partial or full road closure, the production company would be required to notify all impacted homeowners and/or business owners. When filming in a residential area, large production crews would be required to find alternative parking locations to transport crews and equipment to/from so as to not impact street safety. Staff would propose that these types of permits be administratively approved by the Village Manager or his/her designee.

POLICY QUESTION #1: Should the Village adopt a separate Film Permit policy and application fee?

B. Processing Fee

As part of this evaluation process, staff surveyed community film permit fees. The average fee for those communities that actually had a Film Permit requirement was \$110.00, but as the table shows below, the fees range widely from \$10.00 - \$325.00. Staff believes that most film productions present a positive marketing opportunity for the community, and would use caution in using this

permit process to over regulate or discourage filming. If the Board desires to implement a special Film Permit, the survey results suggest that a \$100.00 fee would be reasonably in line with those communities that regulate filming. The \$100.00 would cover processing costs, yet be low enough so as to not unnecessarily discourage smaller-scale productions from operating in Glen Ellyn. In the event of a large scale production, however, that may last longer than a few days, the Village would reserve the right to charge for any additional Police or Public Works overtime costs that may be necessary to support such an operation within the community.

Municipality	Processing Fee
Riverside	\$500.00
Glenview	\$325.00
Elmhurst	\$200.00
Kenilworth	\$50.00 - \$150.00
Skokie	\$100.00
Glen Ellyn Proposed	\$100.00
Highland Park	\$50.00
Lake Forest	\$25.00
Elgin	\$10.00
Oak Park	<i>Assess fee for street closures-see following table</i>
Wheaton	No film permit
Downers Grove	No film permit
Lombard	No film permit
Lisle	No film permit
Batavia	No film permit

C. Additional Road Closure Fee

As part of the filming process, production crews because of the scope of the project, will request full or partial road closures from time to time. The Village does not currently charge an extra fee to special event organizers (5k race, parades, etc.) or resident block parties for street closures. Some communities have taken the position that film permits are profit-making enterprises, and because street closures utilize Village resources and inconveniences a neighborhood, the company should pay additional fees. In addition, some communities also charge additional for any incurred overtime costs for Police and Public Works. As such, if the Board wishes to consider implementing a standard street closure fee, according to the survey data, a \$50/hour charge for partial road closures and \$75.00/hour charge for full road closures would be in line with what other communities charge for film productions (see following table). Alternatively, the Board could choose to assess a flat fee as well.

Municipality	Partial Road Closure/Hour	Full Road Closure/Hour
Highland Park	Varies	n/a

Elmhurst	Varies	n/a
Skokie	\$50.00	\$100.00
Glenview	\$250.00	Prohibited
Elgin	n/a	n/a
Riverside	\$50.00	\$75.00
Lake Forest	\$25.00	\$50.00
Kenilworth	\$45.00	\$90.00
Oak Park*	\$200.00	\$400.00

*Oak Park charges are provided for obstruction of ½ of a block and one (1) full block.

Note: For communities that responded with “varies”, the fee depends on the size and scope of the production, and is not specially listed.

D. Additional Fees

As is the case with special events, on-site police traffic control assistance (if needed) would continue to be charged at the current rate of \$50/hour with a three (3) hour minimum. The \$50/hour police traffic control assistance would be charged along with other fees or charges that the Board would adopt as part of Film Permit. Likewise any overtime assistance of Public Works would be charged at the overtime rate per employee. Additional fees for equipment and other filming related requirements can be determined on a case-by-case basis.

POLICY QUESTION #2: If the Board wishes to implement a filming policy, should the Village charge additional fees for street closure requests?

E. Limitation on Number of Film Productions by Location

If the Board wishes to adopt a film permit, another policy consideration is to determine if there should be a limitation on the number of film permits issued per year at a particular address/location. Doing so would address the situation that occurred in previous years where the resident was complaining about the frequency of commercial film productions adjacent to his residence. Based upon the survey data, only two (2) out of the eleven (11) communities regulate the maximum number of productions at a specific location. Riverside, for example, limits film production at a single private residence to less than ten (10) days per calendar year unless written permission is provided by the Village Manager. The other community that limits the times a filming can occur at one location is Glenview, which states specific locations are only granted one (1) film production permit every twelve (12) months.

POLICY QUESTION #3: If the Board wishes to implement a filming policy, does the Board wish to limit the number of filming permits issued per location to a maximum number per calendar year?

Action Requested

Staff is seeking Village Board feedback and direction on potential updates to the Village’s Special Event Permit policy and direction. Following Board feedback and direction, staff would bring back a proposed ordinance at a future Board meeting reflecting the Board’s policy direction.

Attachments

1. Special Event Permits Issued by Year/Applicant
2. Current Special Event Permit Application Packet
3. Filming “Special Event” Permits Issued by Year/Applicant
4. Draft-Concept Film Permit Application

ATTACHMENTS:

- Current Special Event Permit Application Packet (PDF)
- Special Event Permits Issued by Year (PDF)
- Filming “Special Event” Permits Issued by Year/Applicant (PDF)
- Draft-Concept Film Permit Application (PDF)

Glen Ellyn Special Event Tracking		
Organization	Event	Event Date
Downtown Alliance	Indoor Sidewalk Sale	1/29/16 - 1/30/16
Kate Levinson Locations	29 Optimus Film Shoot (781 Revere Road)	2/10/2016
Downtown Alliance	Beauty Palooza	2/16/2016
Kate Levinson Locations	2.24 FTD Photography Shoot (781 Revere Road)	2/24/2016
GE Park District	Freedom Four Run	7/4/2016
Bridget Communities	GE Backyard BBQ	9/10/2016
GE Library	Equipment Day	7/30/2016
Cub Scout Pack 51	Box Car Derby	4/15/2016
Ben Raby	2016 Tour of Glen Ellyn/Intelligentsia Cup	7/16/2016
Tammy Lemke	Bryall YMCA 5k Y Run : For a Better You	5/14/2016
GE Park District	Kids 2k16 Fun Run	8/6/2016
GE Infant Welfare	Family Fitness Walk	4/16/2016
Downtown Alliance	Jazz	7/16/2016
GE Chamber	Taste of Glen Ellyn	5/19/16 - 5/22/16
Elevate	FAB Fashion Art Beauty	3/19/2016
GE YMCA	Splash and Dash	6/4/2016
Downtown Alliance	Wedding Walk	4/17/2016
Downtown Alliance	Ladies Night Out	11/15/2016
Downtown Alliance	Fall Crawl Shopping Weekend	9/15/16 - 9/18/16
Downtown Alliance	Sounds on the Street	9/2/2016
Downtown Alliance	Home for the Holidays at GE Fire House	12/10/2016
Morreale Law Office	Garage Sale - Date changed	9/17/2016
Kate Levinson Locations	Way to Wonder Commercial (420 Ridgewood & 338 Hill Avenue)	3/31/2016
Kate Levinson Locations	HealthMark Shoot (420 Ridgewood Avenue)	4/14/2016
Downtown Alliance	Wines and Finds	6/16/2016
St.Pets	St.Pets 5k	9/5/2016
St.Pets	Corpus Christi Eucharistic Procession	5/29/2016
Smiling Faces	Fun Fair 2016	6/10/2016
GE Historical Society	Third Annual GE Vintage Auto Fest	5/21/2016
Haggerty Chevrolet	2016 Haggerty Events	/26 - 5/31, 6/30 - 7/5, 7/14 - 7/19, 9/1 - 9/6
Hephzibah Children's Association	Hoof it for Hephzibah 5k	5/30/2016
Fannie May	Chocolate Sale	6/2/16 - 6/5/16
GE Lions Club	Festival of the Arts	8/27/16 - 8/28/16
Glenbard West	Homecoming Parade	10/8/2016
GE Chamber of Commerce	Sidewalk Sale	7/21 - 7/24
Kate Levinson Locations	Crate & Barrel Photography Shoot (501 Longfellow)	7/17/16 - 7/22/16
The Jack H.Marston II Melanoma Fund	This Runs for Jack	10/16/2016
Marcel's	Marcel's 5th Anniversary Customer Appreciation Dinner	9/24/2016
Keller Williams Realty	Oktoberfest	9/30/2016
Kate Levinson Locations	Crate & Barrel Photography Shoot (781 Revere Road)	8/14/16 - 8/19/16
Kate Levinson Locations	Mattress Firm Photoshoot (896 Clifton & 781 Revere)	8/9/2016
Kate Levinson Locations	Sears Filming (Sidewalk Kenilworth and Hill Avenue)	8/10/2016
St.Pets	90th Anniversary Back to School Party	8/21/2016
Bridge Communities	Sleep Out Saturday	11/5/2016
College of DuPage	Food Truck Rally & Sunset 5k	9/17/2016
Glen Crest Middle School	Spartan Pumpkin Run	10/23/2016
Glen Ellyn Bible Church	Block Party	10/9/2016
GE Historical Society	Tavern Day	9/25/2016

Glen Ellyn Special Event Tracking

Organization	Event	Event Date
Anima	CBD Flags	2015
Infant Welfare	Family Fitness Walk	4/19/2015
Alliance	Wines and Finds	5/2/2015
Alliance	Sounds on the Street	9/4/2015
Alliance	Wedding Walk	4/12/2015
Park District	2k15	8/1/2015
GE Bible Church	Worship In Park	5/31/2015
Saylor and Murphy	Fun Fair	6/12/2015
Park District	Moonlight Night Ride	5/1/2015
Park District	Freedom Four	7/4/2015
Chamber	Taste of Glen Ellyn	5/14/2015
Fair Committee	Village Fair	5/13/2015
St. Pets	Labor Day 5k	9/7/2015
One At Optimus Production Company	Payless Commercial (420 Ridgewood)	2/18/2015
Hephzibah House	Hoof it for Hephzibah	5/25/2015
Church World Service	Glen Ellyn/Wheaton Cropwalk	5/3/2015
Alliance	Spa Hop	2/10/2015
Glen Ellyn Park District	Kids 2k15 Fun Run	8/1/2015
GE Historical Society	2nd Vintage Auto Fest	6/13/2015
Vinh Lu	Otterbox Commercial	6/16/2015
GE Chamber of Commerce	Jazz in Glen Ellyn	7/11/2015
Bridge Communities	GE Backyard BBQ	8/29/2015
St.Pets	St. Pets Picnic	9/20/2015
GE Chamber of Commerce	French Market	5/24/2015 Reoccurring
GE Chamber of Commerce	Sidewalk Sale	7/24 - 7/26
St. Pets	Labor Day 5k	9/7/2015
Starbucks	Mobile Café	7/12/15 - 7/24/15
Peoples Community Church	Walk for The Homeless	7/11/2015
GE Environmental Commission	GreenSpace	7/1 - 7/31 2015
GE Lions Club	Festival Of Arts	8/22 - 8/23 2015
The Jack H.Marston II Melanoma Fund	This Runs For Jack 5k	10/8/2015
Glenbard West H.S.	Glenbard West Parade	10/25/2015
Haggerty Chevorlet	Barbeque Sales Event	7/2-7/4
GE Library	Touch-A-Truck	7/11/2015
HGTV	House Hunters International	7/13/2015
Haggerty Chevorlet	Tent Sale	7/16-7/18
Lynnette Christenson	Tom Heighway Rock'n'Roll 5k	9/19/2015
Bridge Communities	Sleep Out Saturday	11/7/2015
GE Bible Church	Block Party	9/12/2015
Haggerty Chevorlet	Labor Day Tent Sale	9/3 - 9/7/2015
Glen Crest Middle School	Spartan Pumpkin Run 3k	10/25/2015
Kate Levinson	Hefty Commercial	9/3 - 9/4
GE Historical Society	Tavern Day	9/27/2015
GE Park Disctrict	Turkey Trot	11/26/2015
St.Marks	Pumpkin Patch	10/10/15 - 11/1/15
Keller Williams Reality	Octoberfest	9/25/2015
GE Chamber of Commerce	Halloween Event	10/31/2015
Hilltopper Alumni	Homecoming Fireworks	10/3/2015
Cub Scout Pack 52	Soapbox Derby	10/24/2015
Nikki Champoulos	Bobby Hall Signing	11/21/2015
Dunkin Donuts	Grand Opening Dunkin Donuts	11/12/2015
GE Chamber of Commerce	2015 Holiday Walk	11/27/2015
Levinson Locations	Barilla Pasta Photo Shoot (691 Chidester)	12/15/2015

Glen Ellyn Special Event Tracking

Organization	Event	Event Date
Chamber of Commerce	Taste of GE	5/15/2014
GE Bible Church	Worship In Park	6/8/2014
History Park	Vintage Auto	5/18/2014
St. Petronille	Last Day Party	6/4/2014
Village Fair	Village Fair	5/14/2014
Smiling Faces	Fun Fair	6/20/2014
Laho LLC	Christmas in July	7/10/2014
History Park	Union Pacific Train	6/21/2014
Chamber of Commerce	Jazz Fest	7/12/2014
Chamber of Commerce	French Market	5/8/2014
Haggerty Chevrolet	Sales Event	5/23/2014
ComEd	Ice Cream Event	6/25/2014
Live Like Katie Foundation	LLKPalozza	9/6/2014
Bridge Communities	Sleep Out Saturday	11/1/2014
Bridge Communities	Backyard BBQ	9/13/2014
Chamber of Commerce	Sidewalk Sale	7/24/2014
Lions Club	Festival of Arts	8/23/2014
Downtown Alliance	Sounds on the Street	9/6/2014
Keller Williams	Oktoberfest	10/10/2014
Downtown Alliance	Ladies Night	11/18/2014
Chamber of Commerce	Halloween Parade	10/25/2014
St. Mark	Pumpkin Patch	10/11/2014
Chamber of Commerce	Holiday Walk	11/28/2014
Alliance	Wines and Finds	5/13/2014
Alliance	Wedding Walk	4/13/2014
Radar Studios	Build - A - Bear (623 Park Boulevard)	9/11/13 - 9/12/14
Arbors of Glen Ellyn	Movie Night	8/8/2014
GE Park District	Turkey Trot	11/27/2014
Glen Ellyn Historical Society	Tavern Day	9/28/2014
B.R. Ryall YMCA	Community Cookout	9/6/2014
Glen Crest Middle School	Spartan Pumpkin Run	10/26/2016
Living Water International	Walk for Water	9/20/2014
Fuschia	Eye brow Day	9/30/2014
Downtown Alliance	Stories with Santa	12/13/2014
Connection of Friends	Trivia Night + Silent Auction	5/12/2014
Ella Duda / Carol White	Live Music on Sidewalk	7/ 1,8,15,22,29/14
Glen Ellyn Park District	Freedom 4 Run	7/4/2014
Woofin & Hoofin	Woofin & Hoofin 5k Run/Walk	6/15/2014
Shannon's Irish Pub	Tom Heighway Rock'n'Roll 5k	9/20/2014
Just of DuPage	lcohol and Drug Addiction Awareness Ever	9/4/14 - 9/7/14

Glen Ellyn Special Event Tracking

Organization	Event	Event Date
St. Marks	Pumpkin Fest	10/12/2013
St. Marks	Pumpkin Patch	10/12/2013
Glenbard West Boosters	Oktoberfest	10/19/2013
Autumn Leaves	Ground Breaking	10/30/2013
Downtown Alliance	Ladies Night	12/3/2013
Chamber of Commerce	Holiday Walk	11/29/2013
Downtown Alliance	Home for Holiday	12/14/2013
Downtown Alliance	Wedding Walk	4/14/2013
Downtown Alliance	Wine Walk	4/13/2013
History Park	Vintage Auto	5/18/2013
Chamber of Commerce	Taste of Glen Ellyn	5/15/13 - 5/18/13
Alliance	Live Music on Sidewalk	7/8 /13- 7/29/13
Alliance	Sounds on the Street	8/30/2013
Bridge Communities	Backyard BBQ	9/14/2013
Bridge Communities	Sleep Out Saturday	11/2/2013
Scott Vog	Glen Ellyn Cancerpalooza	9/21/2013
Chamber of Commerce	Jazz Fest	7/13/2013
Chamber of Commerce	Sidewalk Sale	7/25/13 - 7/27/13
Connection of Friends	2nd Annual Trivia Night + Silent Auction	4/12/2013
Firestone	National Sales Event	5/31/13 - 6/1/13
Glen Ellyn Bible Church	Worship in the Park	6/9/2013
GE Historical Society	Tavern Day	9/29/2013
Lions Club	Festival of the Arts	8/24/13 - 8/25/13
Kathy Gorman	Rudy's Memorial	11/9/2013
St.Pets	Dance Event	6/4/2013
St.Pets	Picnic	9/14/2013
Village Fair Committee	Village Fair	5/15/13 - 5/19/13
Keller Williams	Oktoberfest	9/27/2013
Alliance	Wines + Finds	5/3/2013
The Jack H.Marston II Melanoma Fund	This Runs for Jack	10/20/2013
Chamber of Commerce	Great Glen Ellyn Beer and Ale Festival	10/5/2013

2014 – 2016 – Number of Commercial Film “Special Event” Permits Issued

Year	Location	Organizer	Production
2014	623 Park Boulevard	Radar Studios	Build - A - Bear
2015	420 Ridgewood Avenue	One At Optimus Production Company	Payless Commercial
	777 Forest Avenue	Vinh Lu	Otterbox Commercial
	660 Euclid Avenue, GE Public Library, Downtown GE	HGTV	House Hunters International
	338 Hill Avenue	Kate Levinson Locations	Hefty Commercial
	691 Chidester Avenue	Kate Levinson Locations	Barilla Pasta Photo Shoot
2016	781 Revere Road	Kate Levinson Locations	29 Optimus Film Shoot
		Kate Levinson Locations	2.24 FTD Photography Shoot
		Kate Levinson Locations	August Crate & Barrel Photography
		Kate Levinson Locations	Mattress Firm Photoshoot
	420 Ridgewood Avenue	Kate Levinson Locations	Ways to Wonder Commercial
		Kate Levinson Locations	Healthmark Shoot
	338 Hill Avenue	Kate Levinson Locations	Ways to Wonder Commercial
	501 Longfellow Avenue	Kate Levinson Locations	July Crate & Barrel Photography Shoot
	896 Clifton Avenue	Kate Levinson Locations	Mattress Firm Photoshoot
	Designated sidewalk near Kenilworth & Hill Avenue	Kate Levinson Locations	Sears Filming



Village of Glen Ellyn Film Permit Application

The Film Permit Application must be submitted at least **Ten (10) Business Days prior** to the event date in order to ensure sufficient time for processing. Please contact the Administration Department at 630-469-5000, or refer to the Film Permit Application Guidelines at www.glenellyn.org for more information.

EVENT INFORMATION

Type of Event	☐ Film ☐ TV ☐ Commercial ☐ Photo Shoot ☐ Other (please specify): _____				
Event Date(s)		Time		Road Closure*	Yes ☐ No ☐
Event Date(s)		Time		Road Closure*	Yes ☐ No ☐
Event Date(s)		Time		Road Closure*	Yes ☐ No ☐
Location of Event					
Interior Location	Yes ☐ No ☐	Exterior Location	Yes ☐ No ☐	On Public Property*	Yes ☐ No ☐
Describe the Event Please describe your event in detail. Include the number of crew members that will be present and proposed staff parking locations. Also include the number of production vehicles that will be present during the event.					

EVENT ORGANIZER INFORMATION

Name (First/Last)					
Business Name					
Address				Apt./Unit	
City			State	Zip Code	
Business Phone			Cell Phone		
E-mail Address					
On Site Contact Name					
On Site Phone					

Applications that are complete and submitted to the Village along with any necessary submittals will be processed by Village staff. Incomplete applications will be held for processing until it is complete. Please return your completed Film Permit Application to:

*Fee may apply

By Mail/Drop Off: Village of Glen Ellyn, Administration Department, 535 Duane Street Glen Ellyn, IL 60137

By Email: events@glenellyninfo.org



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 09/19/16 06:30 PM
Department: Administration
Department Head: Al Stonitsch
Category: Resolution
Prepared By: Brendon Mendoza

SCHEDULED

AGENDA ITEM (ID # 2424)

DOC ID: 2424

DuPage County Cool DuPage Initiative.

Background

The Village was contacted in April 2015 by the DuPage County to consider joining the Cool DuPage Initiative, and the Glen Ellyn Environmental Commission was tasked with reviewing the merits of the program, and to develop a recommendation to the Board. As part of that process, the Commission actively engaged in dialogue with the DuPage County Environmental Division's Environmental Specialist, Joy Hinz, to better understand of the program and its objectives. The Commission subsequently voted on June 21, 2016 to recommend Village participation in the County's Cool DuPage Initiative, and formally identified this initiative in its 2016 Strategic Alignment Plan recommendations.

In terms of background on the Cool DuPage initiative, the Environmental Division of DuPage County states, "In 2012, DuPage County approved the Cool Counties Initiative as a way of accepting new environmental challenges. The Cool Counties plan set goals of reducing greenhouse gases from 2007 levels by 10 percent by the year 2020 and by 20 percent by 2030. To move these goals forward, the County brought together the DuPage Green Government Council (GGC)---an entity comprised of utility and energy efficiency experts and community members---to draft this plan of action. This project will continue to put the County at the forefront of saving energy through the continued pursuit of newer technologies". This process resulted in the creation of the County's Cool DuPage Initiative.

Issues:

Cool DuPage Program Details

Objectives

Cool DuPage also actively seeks to improve energy efficiency for residents and businesses by providing information and increasing awareness. The goal of the Plan is to reduce countywide greenhouse gas emissions by ten percent (10%) in 2020 and twenty percent (20%) by 2030. The Cool DuPage Initiative requests that the Village consider the recommendations as stated in the attached DuPage County Energy Conservation & Air Quality Improvement Plan("the Plan"), when implementing improvements to Village infrastructure. The County will also assist the Village, when requested, in order to achieve the goals and recommendations listed within the Plan. The County's Environmental Division will also provide resources, such as notice of grant opportunities, staff resources, and the ability for all municipalities enlisted in the Cool DuPage Initiative to collectively share information.

Village Staff Requirements

As part of the Cool DuPage partnership, Village staff would provide DuPage County with facilities data or survey questions, as needed. . Joining this program, therefore, would require very minimal investment of Village staff time. The Village would be asked to appoint one staff member as the liaison with the County for any questions regarding the program.

Municipalities Currently Participating in Cool DuPage

Village staff reached out to other municipalities currently enrolled in the DuPage program for feedback. Staff received survey responses from four (4) of the six (6) communities currently in the program. The responding communities stated that the program has been beneficial to their respective communities, staff efforts and hours to assist with the partnership have been minimal, and also that there have been no hidden administrative costs or binding commitments, or unanticipated staff time requirements. The following communities currently participate in Cool DuPage:

- ☐ Village of Carol Stream
- ☐ City of Warrenville
- ☐ Village of Westmont
- ☐ Village of Lombard
- ☐ Village of Woodridge
- ☐ Village of Hanover Park

Membership Costs

There is no cost associated with joining the Cool DuPage Initiative or annual membership payment, nor is there a minimal level of financial commitment to specific programs or services.

Additional Questions

Environmental Commission Chairman Adam Kreuzer, as well members of the Environmental Commission, will be present at the workshop, along with DuPage County Environmental Specialist Joy Hinz, to elaborate further on the program and answer any Board questions.

Recommendation

The Environmental Commission is recommending that the Village Board approve Village partnership in the DuPage County Cool DuPage Initiative. If supportive, staff would bring a formal resolution to an upcoming meeting for Village Board adoption.

Action Requested

Approval of the Cool DuPage Initiative through adoption of the Cool DuPage Model Resolution.

Attachments

1. Glen Ellyn Environmental Commission Recommendation of Cool DuPage Initiative
2. DuPage County Model Resolution for Cool DuPage Initiative
3. DuPage County Cool DuPage Flier
4. DuPage County Conservation & Air Quality Improvement Plan
5. Environmental Commission Strategic Plan

ATTACHMENTS:

- Glen Ellyn Environmental Commission Recommendation of Cool DuPage Initiative (PDF)
- DuPage County Model Resolution for Cool DuPage Initiative (PDF)
- DuPage County Cool DuPage Flier (PDF)

Agenda Item (ID # 2424)

Meeting of September 19, 2016

- Energy Plan 4-1-15 w Appendices (PDF)
- Environmental Commission Strategic Plan (PDF)

Resolution No. _____

ACCEPTANCE OF COOL DUPAGE INITIATIVE AND GOALS AS A CHARTER
COMMUNITY IN PARTNERSHIP WITH DUPAGE COUNTY

WHEREAS, the Village of Glen Ellyn and the County of DuPage are seeking common goals under the April 14, 2015 DuPage County Energy Conservation and Air Quality Improvement Plan; and

WHEREAS, the goal of Cool DuPage is to reduce countywide greenhouse gas emissions ten percent by 2020 and twenty percent by 2030 based on the 2007 levels as calculated in the DuPage Energy and Emissions Profile; and

WHEREAS, the Village of Glen Ellyn endeavors to reduce resident and business' energy costs while improving air quality and determines that it is in the interest of the the Village of Glen Ellyn to undertake such activities to improve air quality and reduce energy consumption; and

WHEREAS, the Village of Glen Ellyn has reviewed the DuPage County Energy Conservation and Air Quality Improvement Plan and recommends approval and adoption of this resolution at the Charter Community level to actively work towards the goals and strategies set forth in the aforementioned plan; and

WHEREAS, the Village of Glen Ellyn will strive to achieve the baseline recommendations provided by Cool DuPage within publically owned buildings and within the community; and

WHEREAS, DuPage County, under the auspices of Cool DuPage will assist the Village of Glen Ellyn through technical assistance, when appropriate, to reach baseline recommendations and goals as adopted within the DuPage County Energy Conservation and Air Quality Improvement Plan;

NOW THEREFORE BE IT RESOLVED that the the Village of Glen Ellyn hereby enters into an active partnership with and adopts the goals of the Cool DuPage initiative; and

BE IT FURTHER RESOLVED, that the Village of Glen Ellyn desires to be listed as an active partner on the County's Cool DuPage website and in any applicable publications and social media supporting Cool DuPage.

Enacted and approved this.

Attest: _____



DUPAGE COUNTY

COOL DUPAGE

JOIN THE COOL DUPAGE EFFORT

DuPage County invites residents, businesses and government agencies to join the Cool DuPage effort to reduce energy consumption. By working together, we can help DuPage County become more energy efficient and reduce greenhouse gas emissions.

The Cool DuPage effort originated as part of the Sierra Club's nationwide Cool Counties initiative to reduce greenhouse gas emissions.

DuPage has set a goal to reduce emissions levels 10% by 2020 and 20% by 2030.

The countywide impact of this effort equates to the elimination of more than 250 million gallons of gasoline emissions.

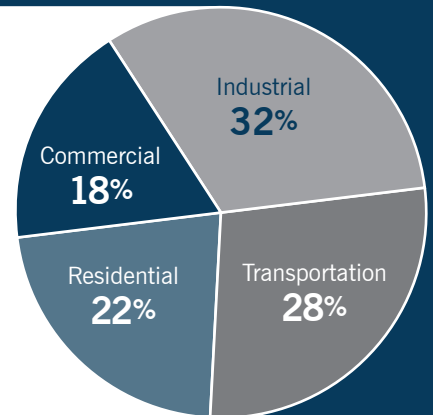
By participating in Cool DuPage, households could see an average annual savings of \$180 with a 10 percent reduction in energy consumption and nearly \$360 at the 20 percent reduction target. Businesses fare even better with a potential annual savings of up to \$120,000 for a 500,000 square foot office building.

EVERYONE COUNTS! All sectors use energy and play an integral role in impacting DuPage greenhouse gas emissions.



BREAKDOWN OF U.S. ENERGY CONSUMPTION BY SECTOR

Source: U.S. Energy Information Administration, Monthly Energy Review table 2.1 (May 2014)
Preliminary data for 2013



Daniel J. Cronin

DuPage County Board Chairman

DuPage County
Green Government Council

To join the Cool DuPage effort visit
www.dupageco.org/cooldupage





DUPAGE COUNTY

COOL DUPAGE

TOGETHER WE CAN MAKE A DIFFERENCE



Household Energy Saving Tips

- Turn lights off when not in use or install occupancy sensors
- Use more energy efficient lighting, such as compact fluorescent (CFL) bulbs or LED bulbs
- Install and use a programmable thermostat
- Check and improve attic insulation to no less than R-49 rating
- Apply weather stripping to exterior doors
- Insulate water pipes and water heater
- Wash laundry in cold water and hang dry
- Plant trees on the southwest side of the house
- Purchase or rent ENERGY STAR appliances
- Carpool or use public transportation
- Visit DuPage County's GOBIKE mapping tool at <http://gobike.dupageco.org> to find walkable, bikeable routes to any location in the County

Business Energy Saving Tips

- Complete an energy assessment through a private company, utility or non-profit
- Use the U.S. Department of Energy's Building Performance Database to see how your building compares
- Pursue U.S. EPA's ENERGY STAR building certification by using their PortfolioManager® tool that assists business with managing energy and water use while tracking greenhouse gas emissions: ENERGYSTAR.gov
- Re-optimize your commercial building
- Receive rebates for improving vehicle performance through Illinois Green Fleets: Illinoisgreenfleets.org
- Encourage carpooling! Designate carpool parking
- Incentivize employees to use public transportation
- Review your campus for access to bus routes

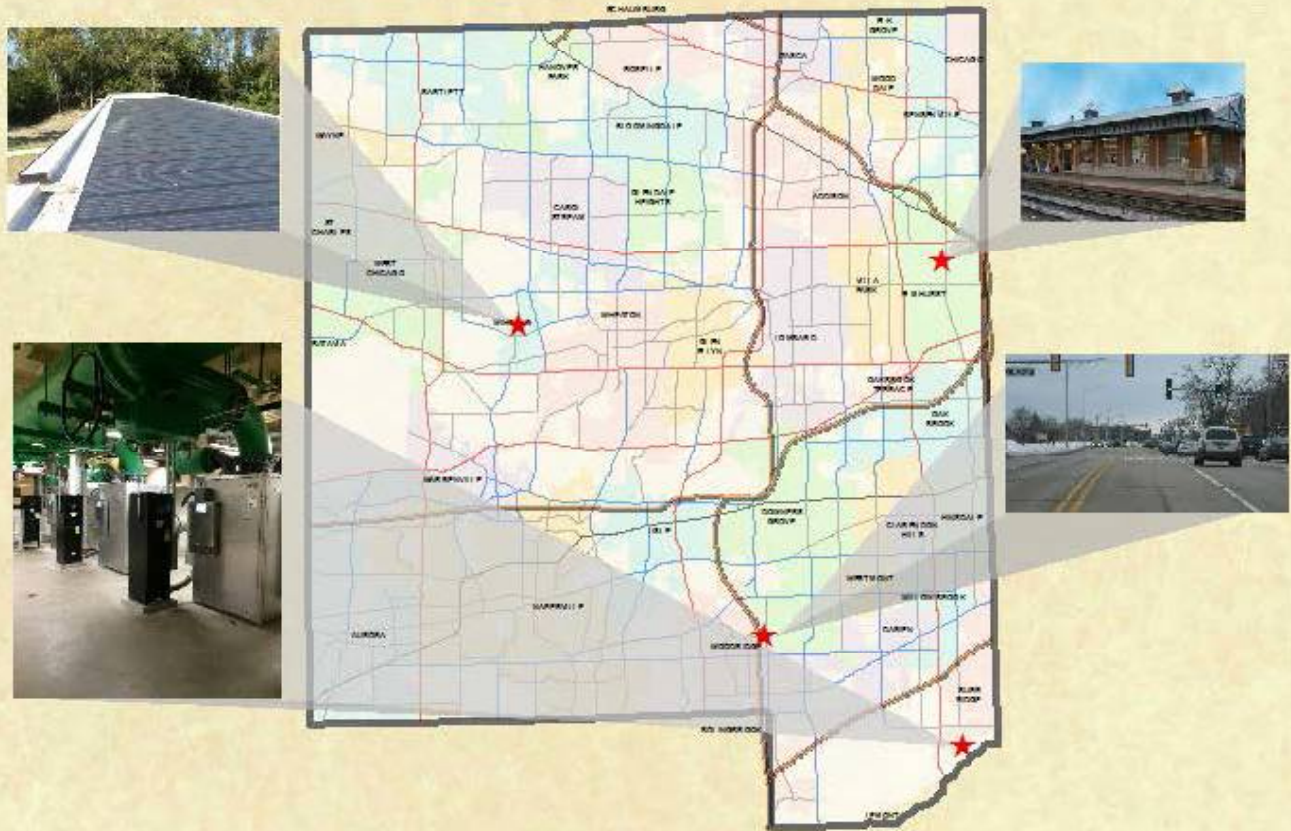


JOIN THE COOL DUPAGE EFFORT.

Visit www.dupageco.org/cooldupage
for more energy saving solutions,
incentives, rebates
and other opportunities.



DuPage County Energy Conservation & Air Quality Improvement Plan



DuPage County's Plan to implement a Sierra Club Cool County Strategy
10% greenhouse gas reduction from 2007 levels by 2020 & 20% by 2030

DuPage County
Daniel J. Cronin, County Board Chairman
421 N. County Farm Rd., Wheaton, IL 60187
(630) 407-6700; www.dupageco.org/coolcounties

DuPage County Green Government Council

DuPage County Board Chairman Daniel J. Cronin appointed the Green Government Council in 2013 as a special advisory group. The Council assists the County by identifying ways to effectively conserve natural resources, reduce regional environmental impacts, develop sustainability initiatives and promote economic opportunities for businesses, community organizations and residents. One of the Council's projects is the implementation of the Cool Counties Initiative to reduce greenhouse gas emissions. This plan serves as the roadmap to the success of this effort to improve countywide air quality.



Brook McDonald, Chair

President & CEO

The Conservation Foundation

Steven M. Morley

Mayor

City of Elmhurst

Richard Smith

Branch General Manager Energy Solutions Americas

Johnson Controls, Inc.

James Jerozal

Managing Director, Energy Efficiency

Nicor Gas

Michael Kearney

Senior Director, Energy Environmental Solutions

Siemens Industry, Inc.

Todd Thornburg

Energy Efficiency Portfolio Manager

ComEd

Kris Bachtell

Vice President of Collections and Facilities

Morton Arboretum

Brett Thomas

Marketing Manager

Calamos Family Partners

DuPage Energy Conservation & Air Quality Improvement Plan

Table of Contents

Executive Summary	4
Background	4
Goals	5
DuPage Consumption Data 2007 - 2012	6
Regional Consumption Commercial Sector	7
Emissions Profile for DuPage County	8
Energy Stability & Demand	10
Energy Security	11
7A Energy Efficiency	11
7B Smart Grid	11
7C Hybrid and Energy Efficient Modes of Transportation	11
7D District Energy and Combined Heat and Power	11
7E Renewable Energy Sources.....	12
7F Energy Research	12
Strategies	12
8A Landscaping for Efficiency	13
8B Green & Efficient Buildings Incentive Program.....	13
8C DuPage – A History of Energy Efficiency	13
8D DuPage Campus Buildings Plan	17
8E Commercial Strategies	18
8F Residential Strategies	20
Conclusion	22
Glossary of Acronyms	23
List of Appendices	23
Appendix A – ComEd 2014/2015 Programs	
Appendix B – Nicor Gas 2014/2015 Programs	
Appendix C – IL DCEO Program	
Appendix D – Case Studies (Nicor Gas, ComEd, Johnson Controls, Siemens, TRANE)	
Appendix E – Elevate Energy 2007-2012 Emissions Data (fka CNT Energy)	
Appendix F – DuPage County Board Resolution EN-0001-12	
Appendix G - The Morton Arboretum's Northern Illinois Species List and Tree Selector	

Executive Summary

Energy is part of our everyday lives. It is the lights we turn on, the thermostat that we set and the fuel used in the modes of transportation that move us around locally and globally. The packaging, products, and shipments we depend on are all made possible by energy. Today, new technologies and consumer habits are changing rapidly. New types of energy are creating new competition in the marketplace, creating green jobs, and producing lower levels of pollution. We cannot turn on the television or computer without hearing about a greener, cleaner alternative that lessens environmental impacts, saves us money, and drives new opportunities for the future.

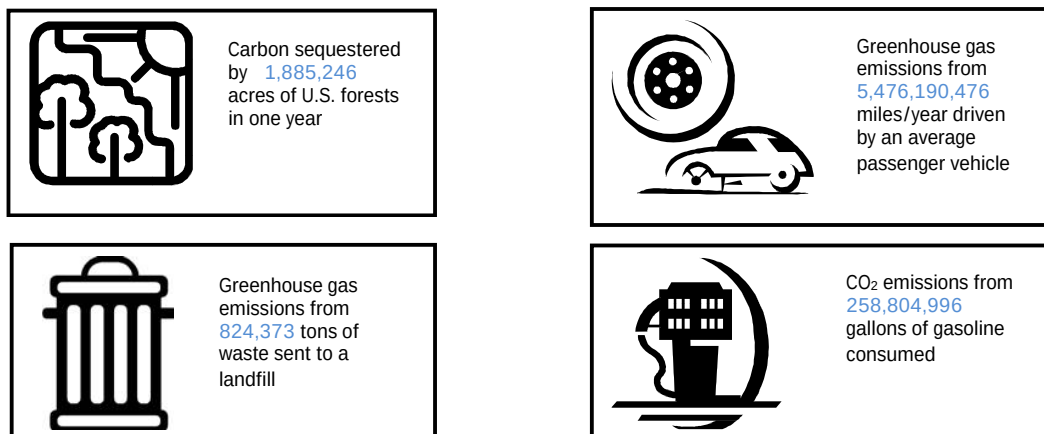
DuPage County government has a rich history of leading the way environmentally by taking advantage of new technologies and practices. Years ago, the county created its own power plant for heating and cooling the county complex, which reduced the use of dangerous refrigerants while continuing to operate efficiently. More recently, the County has installed a vegetated and a solar roof, purchased over 30 alternative fuel vehicles for county operations, and begun to retrofit our aging mechanical equipment.

The County is continuing to measure the resources being used by county operations and the community as a whole. By working with the utility companies and energy consultants, it will be promoting new technologies that will impact natural gas usage, electricity usage, and lower emissions from vehicles. One initiative that looks at energy consumption and its associated costs is the Cool Counties and Cool Cities Programs. Adopted by many Illinois communities, the programs focus on creating energy smart strategies that will keep DuPage County a thriving and sustainable place to live and work.

BACKGROUND

In 2012, DuPage County approved the Cool Counties Initiative as a way of accepting new environmental challenges. The Cool Counties plan set goals of reducing greenhouse gases from 2007 levels by 10 percent by the year 2020 and by 20 percent by 2030. To move these goals forward, The County brought together the DuPage Green Government Council (GGC). An entity comprised of utility and energy efficiency experts and community members to draft this plan of action. This project will continue to put the County at the forefront of saving energy through the continued pursuit of newer technologies.

According to the U.S. EPA's Greenhouse Gas Equivalencies Calculator¹, the success of the calculated 20% countywide reduction would result in the equivalent savings illustrated below.



¹ U.S. EPA Greenhouse Gas Equivalencies Calculator updated April 2014
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

On the surface, reducing energy consumption seems like a concept that would be easy to implement. Many programs are as simple as replacing appliances, programming thermostats, switching to a new light bulb and turning lights off when they are not needed. This Plan; however, requires comprehensive measures that will achieve aggressive objectives and goals. It will guide the County, stakeholders and partners in providing programs and services that will truly impact emissions and create economic benefits in the process. By sharing new ideas and practices among all these entities, energy savings increases exponentially creating larger benefits for the entire DuPage community. This Plan's success is furthered by the seven (7) cities that have approved the Cool Cities goals and have been making great strides in reducing energy consumption – Aurora, Bolingbrook, Carol Stream, Elmhurst, Lombard, Westmont and Villa Park. These cities are models for implementation at the local level. The strategies in this Plan should serve to augment existing programs while encouraging new entities to join in this effort.

A tangential benefit of this program is that energy efficiency creates jobs and supports economic stability for residents and businesses within the county. A \$1 million dollar investment in a building efficiency improvement will initially support approximately 20 jobs throughout the economy². In comparison, the same \$1 million dollar investment put in the economy as a whole supports 17 jobs. In addition to the greater increase in job creation through energy efficiency investments, the savings on energy bills provide more dollars that can be spent elsewhere in the economy. According to a study by the City of Chicago, residents and businesses of northeastern Illinois spend more than \$3 billion a year on energy bills. Shifting a portion of spending on energy efficiency would stimulate growth in employment and business expansion.

This document will cover commercial and residential information with strategies to reduce energy consumption. The commercial sector is made up of a very complex and diverse set of users including, but not limited to, industrial, retail, medical providers, office space, convenience and grocery stores, hotels, restaurants, manufacturers, education, non-profits and governmental entities. Energy efficiency offerings must be diverse to serve these different categories and their unique operations.

2. GOALS

In addition to creating jobs and lowering fuel and utility bills, this Energy Plan will help create cleaner air by reducing emissions in our region. DuPage County will reduce what are commonly known as greenhouse gases (GHG) which can have ill effects on our health and environment. GHGs consist of Carbon Dioxide- CO₂, Methane- CH₄, Nitrous Oxide- N₂O and varying fluorinated gases. When fuels are burned for energy, the emissions produced negatively impact breathing especially for children, the elderly, and those with medical conditions. Nitrous Oxide, for example, comes from industrial manufacturing plants, electric utilities, and motor vehicle exhaust. When N₂O mixes with volatile organic chemicals (VOCs) such as gasoline vapor, the two gases create ozone pollution which is responsible for ozone action days. Once released into the environment, Nitrous Oxide gas molecules stay in the atmosphere for an average of 120 years.

For the purposes of this project, the County will be utilizing a standard CO₂ equivalent for the entire mix of GHG. By achieving the goal of a 20% reduction below 2007 levels by 2030, this Plan would result in keeping approximately 2.3 Million Metric Tons of CO₂ out of the air.

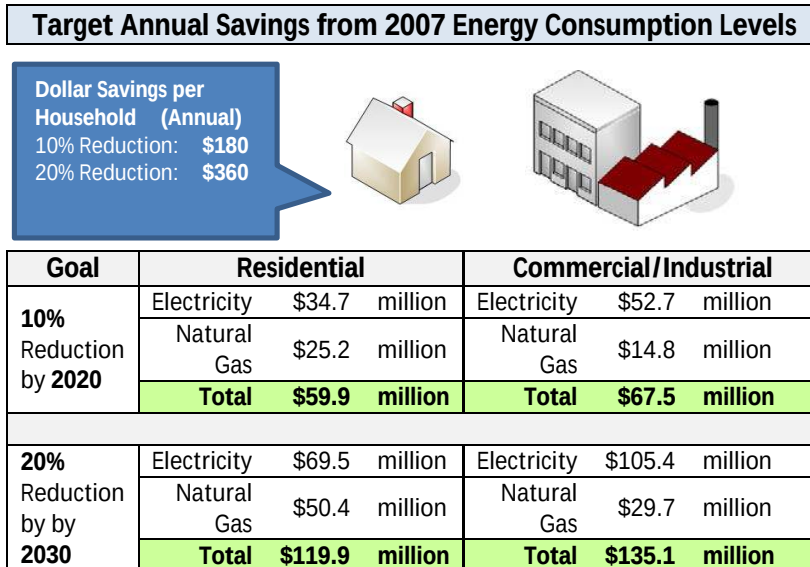
The U.S. EPA has determined that the majority of greenhouse gases come from burning fossil fuels to produce energy (electricity & natural gas) with transportation (trucks, cars, buses, trains) being the second highest contributor³. It is important to note that different fuel sources generate varying levels of the gases. For example, traditional electricity production contributes more GHG than natural gas production on a per unit basis. Therefore, more program efforts will be placed on reducing traditional forms of electricity consumption within this plan. Savings will be calculated using the reduction in greenhouse gases and energy costs.

² American Council for an Energy Efficient Economy (ACEEE, [fact sheet](#))

³ U.S. EPA <http://www.epa.gov/climatechange/ghgemissions/sources/transportation.html>

As noted in Figure 1 below, the projected savings from this effort are significant from an air quality perspective in addition to the financial benefit when prices fluctuate.

Figure 1. Estimated monetary savings from achieving the goals in this plan.



Data provided from the report "DuPage Energy and Emissions Profile" provided by Elevate Energy, November 22, 2013 Values rounded for simplicity.

The energy cost used in the above table are \$0.114/kWh and \$0.804/therm for residential and \$0.059/kWh and \$0.552/therm for commercial/industrial.

3. CONSUMPTION DATA - 2007 THROUGH 2012

In order to establish a baseline set of numbers to measure energy and emissions from total electricity, natural gas, and vehicles miles traveled, DuPage County worked with Elevate Energy (formerly CNT Energy) to aggregate communitywide data from both 2007 and 2012 consumption records. Once the numbers came in, the County was surprised to find an actual reduction in 2012 levels when compared to 2007 levels. The contributing factors include an economic downturn, significant invest by the Federal Government in energy, an increased participation in U.S. EPA's ENERGY STAR benchmarking program; legislative requirements around benchmarking & transparency; growth in the U.S. Green Building Council's LEED designed buildings; energy code trends toward efficiency codes; utility rebates & incentives; and, sustainability through the recognition in the real estate market on MLS listings.

Table 1 - Total Natural Gas Consumption (Therms), 2007 & 2012

DuPage	2007	2012	2020 Target	2030 Target
Residential	313,707,381	263,468,701	282,336,643	250,965,905
Commercial & Industrial	268,672,694	239,149,653	241,805,425	214,938,155
Total	582,380,076	502,618,354	524,142,068	465,904,061

Table 2 - Total Electricity Consumption (kWh), 2007 & 2012

DuPage	2007	2012	2020 Target	2030 Target
Residential	3,046,756,030	2,779,395,133	2,742,080,427	2,742,080,427
Commercial & Industrial	8,931,290,066	8,255,502,646	8,038,161,059	7,145,032,053
Total	11,978,046,096	11,034,897,780	10,780,241,486	9,582,436,877

Vehicle Miles Traveled (VMT) is also an important component of the DuPage County effort. The DuPage County Department of Transportation concluded that if you are able to reduce the VMT by 10% you will reduce the fuel used or burned by 12.5 – 13% and emissions (grams/hour VOC) by 13-15%. This is based on using a congested intersection such as the intersection of North Avenue and Bloomingdale Road in Glendale Heights, for example. Reducing VMT and vehicles on the road will result in a better traffic flow which will enable the traffic signals to work in optimal efficiency mode as designed which results in reduced idling time for county travelers and less pollution being emitted locally. Each of these outcomes equals better quality of life in our daily routines. The information above was calculated by Elevate Energy and derived from travel statistics provided by the Illinois Department of Transportation (IDOT) based on Illinois Environmental Protection Agency (IL EPA) odometer and population data. Since 2007, there was only a slight decrease of 2% in total vehicle miles traveled and the average household in the County drove 19,833 miles totaling 6.6 billion miles (illustrated below). “On-road” travel captures trips only within county boundaries.

Table 3 - DuPage County Vehicle Miles Traveled (VMT), 2007 -2012

VMT	2007	2012
Total On-Road VMT	8,633,562,650	8,424,261,955
Household VMT	6,862,947,547	6,639,375,551
GHG Emissions	3,780,905 Metric Tons CO ₂ e	3,689,246 Metric Tons CO ₂ e

4. REGIONAL CONSUMPTION COMMERCIAL SECTOR

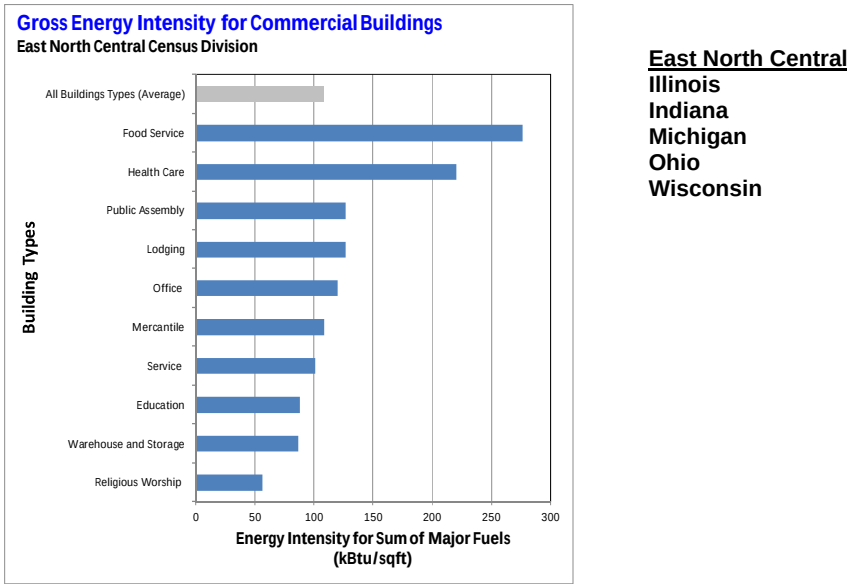
One of the largest energy consumers is the commercial sector. The energy used to heat and cool a large scale buildings and the task of manufacturing, serving food or provide other services is significant. In an effort to further understand the hierarchy of users and to prioritize strategies, the GGC reviewed the Energy Information Administration (EIA) data for our region⁴. The group also recognized that not every sector held an equivalent opportunity for savings. The EIA is compiling data from a survey of 2010 data. According to the EIA, the preliminary results show that there were 5.6 million commercial buildings in the United States in 2012, comprising 87.4 billion square feet of floor space. They calculated that this is a 14% increase in the number of buildings and a 22% increase in floor space since 2003.

The U.S. Energy Information Administration obtains voluntary data from buildings throughout the country. It includes energy usage data from a vast amount of commercial buildings (schools, hospitals, office buildings, stores, restaurants, warehouses etc.) for the purpose of comparing and establishing benchmarking data. The State of Illinois is located in Zone 2 (IL, IN, OH, MI).

Figure 2 on the following page contains excerpted information showing consumption by building type. While this information is pertinent for planning purposes, it does not take into account the energy necessary to accomplish critical tasks in areas such as health care to operate medical equipment. This information is helpful when benchmarking buildings against similar users in similar climates. It also provides guidance to the GGC and the County in prioritizing strategies with commercial users.

⁴ U.S. Energy Information Administration CBECS data, Table C10

Figure 2 – U.S. Energy Information Administration CBECS data



Source: Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey. Consumption and Gross Energy Intensity by Census Division for Sum of Major Fuels: Part 1 Census Division = East North Central. CBECS does not provide energy intensity data specific to Food Sales, Public Order and Safety, Vacant, and Other building types for this Census Division, therefore they were not included in the this chart

5. EMISSIONS PROFILE FOR DUPAGE COUNTY

DuPage County also worked with Elevate Energy to calculate GHG emissions from the use of natural gas, electricity and gasoline and diesel fuels for the baseline year 2007 and a status measurement for the year 2012. The data is provided in the figures and tables below.

Emissions attributed to electricity consumption are different from those attributed to natural gas consumption because of differences in the production of energy from different sources. Greenhouse gases listed in this plan include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). For purposes of this document, the aforementioned were calculated to an industry standard CO₂ equivalent. This calculation takes into account the differing levels of emissions from the different energy sources, as is standard practice in the industry and the federal level. The County did not normalize to account for weather fluctuations. This type of study is recommended to be completed every five (5) years during the time frame for implementing this Plan.

Below is a comparison breakdown of the County’s emissions by sector which represents a reduction of approximately 7% from 2007 to 2012. It is important to note that the reduction in the electricity sector is the largest contributor to these carbon reductions. When compared to the U.S. overall, the carbon emissions from the electricity sector decreased 15% over the same time period due to lower demand following economic downturn, greater use of natural gas for power production and the increase in renewable energy as a percentage of the overall supply mix (Information provided by Elevate Energy DuPage County Emissions Profile 2007 – 2013). Additional information can be found in Appendix E which includes the entire report generated by Elevate Energy.

Figures 3 & 4 indicate that the consumption of electricity far exceeds other categories. Since electricity is the largest contributor to GHG, its reduction will be a priority in implementing the goals.

Figure 3 – DuPage County Emissions 2007
in million metric tons of CO2 equivalent

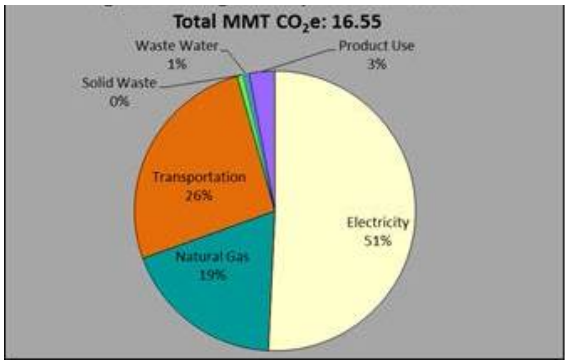


Figure 4 – DuPage County Emissions 2012
in million metric tons of CO2 equivalent

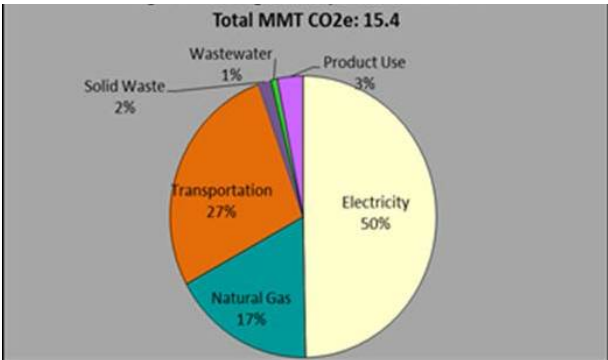


Table 4 below depicts a comparison in the emissions during the first 5 years post baseline. It indicates that the biggest opportunities to make an impact are with electricity, natural gas and transportation consumption. The other four uses will be considered from a sustainability standpoint but are not the critical reductions in this Cool Counties Initiative.

Table 4. Emissions by Sector, County and Region, 2007 – 2012

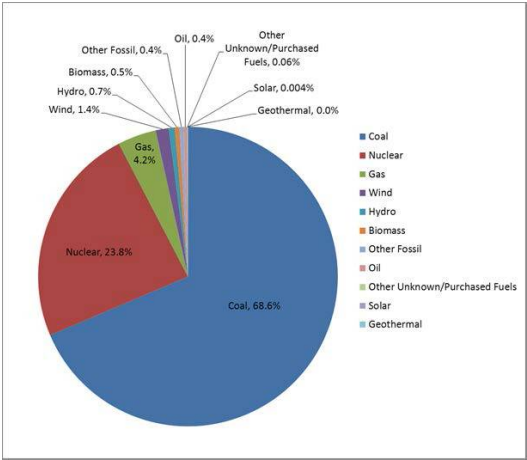
Sector	2007 MMT CO ₂ e	2012 MMT CO ₂ e
Electricity	8.40	7.65
Natural Gas	3.10	2.67
Transportation	4.33	4.23
Solid Waste	0.11	0.24
Waste Water	0.12	0.12
Product Use	0.49	0.48
TOTAL	16.55	15.39

The above information reflects a reduction from 2007 levels which has varying contributing factors. The residential population was reduced by 1% during the time frame. An argument could be made that the significant Federal investment in energy efficiency and an overall movement toward reducing operating costs had a larger impact. The GHG emissions do not take into account variances in weather or any other factors that may affect energy consumption and subsequently greenhouse gas emissions. These reported emission levels are a real outcome based on a detailed survey of emissions within the County and 2014 emission standards. While the data is positive and as an aggregate the County is trending to meet the 2020 goal, it is the next level of savings that are expected to be more difficult to achieve. Increasing energy efficiency standards for residential lighting and appliances may lead to a diminishing pool of savings in the residential market. For example, replacing a common 60 watt incandescent light bulb with an equivalent 13 watt compact fluorescent light bulb (CFL) will save 75% in energy usage. However, replacing the same 13 watt CFL light bulb with an equivalent 10 watt LED light bulb saves only 20%. This will prove to be a challenge in the later years of the goal.

6. ENERGY STABILITY & DEMAND

Another benefit of this effort is to ensure long-term access to energy for a growing population and business community. The GGC reviewed the U.S. EPA’s eGRID, which is a comprehensive source of emissions data related to electricity generation in the United States. Information provided by eGRID is commonly used by many organizations for estimating avoided emissions from programs and projects that reduce consumption of grid-supplied electricity. As you can see, the majority of electricity is produced by non-renewable resources. While this plan will promote a strategy of becoming more efficient before the pursuit of renewable energy, it is important to note the amount of conventional fuel sources of electricity that would need to be displaced by other power supplies depicted in the graph below.

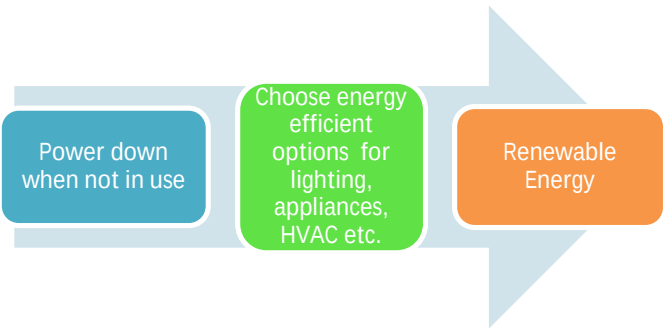
Figure 5. Energy Resource Mix U.S. EPA eGRID 2010 DuPage County



Annually, the EIA provides an Electric Power Table Series which tabulates the number of electric power customers. The most recent data reflects an increasing demand for energy in the U.S. Since 2002, the U.S. has seen an increase of 9% in the number of customers. This decade long increase in demand is consistent with population growth and underscores the importance of identifying methods to decrease consumption.

When embarking upon the reduction effort, DuPage County reviewed the typical protocol to follow in achieving savings. The energy efficiency hierarchy below promotes that entities first become as efficient as possible and then consider alternative energy sources. The County has pursued this philosophy and recommends that others follow this methodology.

Figure 7. DuPage County Energy Efficiency Steps



7. ENERGY SECURITY

DuPage County is adopting practices and measures that can help mitigate the aforementioned risks. Through energy efficiency, diversifying fuel sources, and supporting upgrades to the existing energy distribution systems, The County can meet these challenges and strive to advance its energy security.

7A. Energy Efficiency

Commercial buildings and homes account for 40% of all the energy use in the U.S. This is more than either the transportation or industry sectors. Energy efficiency reduces energy consumption and associated costs, helping to mitigate risk due to energy price fluctuations. It lessens the need for additional generation and distribution assets and reduces the amount of greenhouse gas emissions produced that can contribute to climate change. Specific to electricity, energy efficiency lowers peak demand, reducing the stress on the local electrical grid and enhancing its reliability.

7B. Smart Grid

The existing electrical grid is over a hundred years old and although it has been updated as technology advanced through each decade, it is in need of a comprehensive upgrade to handle the increasing complexity and power needs of the 21st Century. Smart Grid is a modernization of the existing electric infrastructure to provide a stronger, more connected and therefore more reliable electrical grid by linking supply and system demand. Smart grid technology merges the power of computers with the electric grid to create a more stable electrical distribution system that provides fewer outages, quicker power restoration and more reliable power. In addition, it allows the end users to manage their energy use economically through the use of smart meters.

7C. Hybrid and Energy Efficient Modes of Transportation

Hybrid vehicles use less fuel and produce fewer greenhouse gas emissions than their conventional counterparts. More than a third of the energy consumed in the U.S. comes from petroleum based fuels, which is more than any other energy source. The transportation sector consumes 71% of all petroleum based fuels. Energy efficient vehicles such as hybrids, plug-in electric hybrids, electric and natural gas powered vehicles help reduce the dependence on petroleum based fuels. In addition, plug-in hybrid and electric vehicles can produce even lower emissions if the electricity supplied comes from renewable energy.

Further reductions in the consumption of petroleum based fuels can be achieved with initiatives such as reducing the amount of single occupancy vehicles (SOVs) on the road, improving the convenience of public transit, encouraging carpool or vanpool systems and building bicycle-friendly infrastructure such as bicycle sharing programs, bicycle lanes, off-street paths, and bicycle parking. In addition, fleet vehicles that support our freight movement, public transportation, waste removal and other related operations can leverage natural gas to replace petroleum based fuels and contribute to lower carbon emissions. The fuel delivery infrastructure required to supply the transportation sector as well as vehicle engine technology are making great strides in the areas of fleet transportation.

7D. District Energy and Combined Heat and Power

District Energy and Combined Heat and Power (CHP) plants supply locally produced electricity, heating and cooling. CHP represents approximately 8% of the current U.S. electric generating capacity and over 12% of the total electricity generated. A variety of fuel sources such as natural gas, biomass, biogas and oil can be used as a fuel source in CHP applications. Generating electricity at the site reduces reliance on the grid, avoiding potential outages and transmission energy losses, inherent to electrical distribution systems. In CHP systems, the waste heat created from the production of electricity is recovered to provide useful heating and cooling. This contributes to the high efficiency of CHP systems and reduces greenhouse gas emissions.

7E. Renewable Energy Sources

Less than 3% of the electricity created in the region comes from renewable energy sources. Almost 74% of the electricity is generated from fossil fuels (coal, natural gas, etc.) and 24% from nuclear energy. Renewable energy sources such as solar, wind, and geothermal reduce the demand on the electrical grid and decrease the reliance on fossil fuels. Incorporating these clean sources of energy will displace fossil fuel consumption and will lead to a reduction in greenhouse gas emissions. In addition, diversifying the locally used fuel mix with renewable energy will provide some economic protection against potential price volatility in traditional fossil fuels due to supply disruptions and high market prices. The State of Illinois has a reasonably aggressive renewable energy portfolio goal of 25% by 2025 which requires approximately three times more renewable energy be produced vs current levels. This is a state level mandate that supports the County's overall carbon emissions reduction goals and should provide opportunity to show leadership in the growth and application of renewable technology.

Many municipalities have supported renewables through the use of electricity aggregation. Nine municipalities in the County have elected to go 100% renewable. Such activities show preference for renewable energy and can boost their market share.

7F. Energy Research

Local research in the areas of energy conservation, green technologies and renewable energy can provide immediate and long-term benefits. For example, according to the National Solar Jobs Census 2013, solar employment grew 10 times faster than the national employment rate of 1.9 percent. Through government support of local colleges and startups through grants and other mechanisms, the results of such research can provide a continued path towards energy sustainability and security, while stimulating the local economy.

8. STRATEGIES

The previous sections highlight the goals, actual consumption, the importance of pursuing this effort but we have not addressed our roadmap to make these countywide changes. This section is broken into six (6) categories including (1) Landscaping for Efficiency; (2) DuPage County's Green Building Incentive Program; (3) an overview of County Campus efforts; (4) County campus recommended strategies followed by (5) Commercial & residential strategies.

8A. Landscaping for Efficiency

Alternative landscaping decreases greenhouse gases in the atmosphere through the reduced use of high emission tools, such as lawn mowers, and by storing GHGs in woody plant tissue. The use of native vegetative planting in open areas instead of grass lawns reduces emissions by 18 tons/year over 1,000 acres. It is calculated by the Illinois Environmental Protection Agency that in the Chicago area alone, the use of lawn equipment accounts for 50 tons of emissions per day in the summer. This is massive compared to the roughly 2 tons of emissions produced per day by industries like an auto assembly plant.⁵

Trees play an especially important part in improving air quality, reducing energy costs, removing pollutants from the air and storing carbon. A study conducted in Baton Rouge, Sacramento and Salt Lake City found that four shade trees planted by a home resulted in decreased CO₂ emissions of 16,000; 41,000 and 9,000 tons respectively⁶. They expand that these savings do not include the cooling benefits which can be substantial. Evaporation from an individual tree can produce the cooling effects of 10 room sized air conditioners operating 24 hours per day and three or more trees planted on the sunny side of a house will provide enough shade to reduce air conditioning costs by as much as 30%.⁷

⁵ Nowak, D., Rosenthal, S., and J. Vaughan. (2004, December) Exploring the Environmental, Social and economic Benefits Conference. Chicago, IL. http://www.epa.gov/greatlakes/greenacres/conf12_04/conf_knowledge.html

⁶ Akbari, H. Shade trees reduce building energy use and CO₂ emissions from power plants. Environmental Pollution 2002.

⁷ Trees Reduce Energy Costs. Urban Forestry Network

In a 2010 survey and analysis conducted by The Morton Arboretum in cooperation with the U.S. Forest Service of the seven-county Chicago region, DuPage County has an estimated tree population of 17,300,000. This is about 11% of the 157 million trees in the Chicago region. These trees combined store 16.9 million tons of carbon at a value of \$349 million and sequester 677,000 tons of carbon annually. These trees reduce energy usage by \$44 million annually. The trees and shrubs across the Chicago region remove 24,170 tons of pollution from the air for an annual value of \$183 million.⁸

Invasive species such as European buckthorn, which is the most abundant tree species identified in the County in the 2010 survey, and emerald ash borer pose a significant threat to our trees and green spaces. Efforts to control and replant from such effects should be considered high priority with a focus on species diversity. Guidance on replanting can be found in Appendix G, The Morton Arboretum's Northern Illinois Species List and Tree Selector.

The Conservation Foundation developed the Conservation@Work and Conservation@Home programs. Both provide hands on education about value of native planting and sites can receive certification highlighting the accomplishment. These programs, along with their new Pollinator Meadow Mix, are especially important on large plots of land on commercial, government and large developments. One of the other environmental benefits includes reduced water usage which can also lower energy consumption in the purifying and delivery water to the consumer.

8B. Green Building Incentive Program

DuPage County is home to more than 100 U.S. Green Building Council LEED certified buildings (Leadership in Efficiency and Environmental Design). The County's Office of Emergency Management received LEED for commercial interiors designation in January 2013 and the Children's Advocacy Center has been constructed to meet LEED Gold standard. In early 2015, the County considered an incentive program to raise the number of these types of eco-friendly buildings.

The County supports the construction of more efficient and less impactful buildings through the Green Building Incentive Program. The program is designed to enable private sector developers or property owners who implement "green design standards" into their projects to receive the following development incentives: (1) Expedited Building Permit Review Time (25% time reduction); (2) Expedited Stormwater Review Time for Incorporated/Unincorporated (25% time reduction); (3) Reduction of Building Permit, Zoning and Plat application fees (10% fee reduction); (4) Expedited Zoning (ZBA) and Plat process.

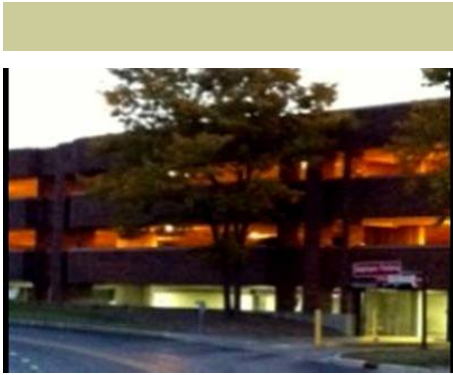
The opportunity to participate in the *DuPage County Green Building Incentive Program* is available to all types of construction and developments that meet the U.S. Green Building Council or equivalent Gold or Platinum criteria. The program was developed in partnership with Choose DuPage and is an economic development tool as well as a conservation effort. More information on the program can be found at the County's website dupageco.org/greenbuildingincentive.

8C. DuPage – A History of Energy Efficiency

For several decades DuPage County has been working to improve its campus by reducing energy consumption and piloting the use of renewable technology. Listed on the following pages are several of the projects that the County has completed and the results of an assessment to continue these improvements.

⁸ Nowak, D., Hoehn, R.E., Bodine A.R. Crane, D.E., Dwyer, J.F., Bonnewell, V., Watson, G. Urban Trees and Forests of the Chicago Region, U.S. Forest Service 2013.

8C. DuPage – A History of Energy Efficiency cont'd



DuPage County replaced 1,040 high pressure sodium fixtures in the two four level parking garages with LED for an estimated immediate electricity savings of 50%. The program reduced energy consumption and improved lighting quality. In the photo to the left, the bottom floor shows the LED lighting and the 2nd and 3rd floors show the older high intensity discharge lighting.



In 2010, DuPage County re-optimized traffic signal system timing at 111 intersections on major arterial roadways and expressway interchanges. The program yields an estimated savings of more than 763,500 gallons of fuel/year.

The County converted 106 county-maintained traffic signals and 6 flashing beacons from incandescent bulbs to LED saving 85% of energy previously consumed, reducing maintenance costs while improving visibility and reliability.



DuPage County replaced 81 appliances at the Convalescent Center. The existing appliances ranged from 25 to 40 years in age and are located in the existing kitchen, laundry and physical therapy areas of the building. The energy savings ranged between 10% and 35% per appliance.



DuPage County installed an ENERGY STAR white roof in place of the existing black asphalt roof in four locations: ancillary covers above two stairwells, one above a pedestrian bridge, the roof of the Office of Emergency Management building and the roofing over the auditorium. The white roof lowered the roof temperature reducing the energy demand when cooling the building. The new roof also has a longer life expectancy and is expected to reduce the demand on the existing HVAC system.

8C. DuPage – A History of Energy Efficiency cont'd

DuPage County exchanged 163 existing incandescent exit signs with energy efficient LED signs throughout the Convalescent Center. The project enabled the Center to standardize the signs for consistency and safety of the staff and residents. Due to the longer life span of LEDs, the Center will also see a savings in resources used replacing bulbs.



DuPage County removed high pressure sodium lighting and metal halide fixtures at the County's Highway Maintenance Garage and installed high output fluorescent fixtures. The County replaced the 400-watt lighting fixtures with efficient 168-watt fixtures with occupancy sensor controls. This project reduced energy consumption and increased lighting levels.



DuPage County installed occupancy sensors in the Administration, Judicial Office Facility and JOF Annex buildings. The sensors allow the County to turn off lighting that had previously remained on in the evenings when cleaning crews were working in the building. The new control system lights the area only when it is occupied.



DuPage County Department of Public Works implemented a facility wide lighting retrofit at the underground maintenance garage, Woodridge Greene Valley and Knollwood wastewater treatment plants. The retrofit included installation of compact fluorescent, tubular fluorescent, LED fixtures and exit signs. A total of 1056 fixtures were upgraded saving 55 kilowatts or 242,600 kilowatt-hours of electricity.

8C. DuPage – A History of Energy Efficiency cont'd



DuPage County utilized the Illinois Dept. of Commerce & Economic Opportunity's energy efficiency incentive program and funding from the Illinois Clean Energy Foundation to retrofit the lighting at the jail. The existing T12 lamps were removed and replaced with the more energy efficient T8 lamps. The project included the replacement of 2,023 fixtures and 5,283 lamps. With the aforementioned funding mechanisms, there was zero cost to the County.



The Child Advocacy and Neutral Exchange Center located at DuPage County's campus houses a 15 kW solar photovoltaic system installed over a fully-adhered roofing system, 60-mil thick reinforced thermoplastic polyolefin membrane. The roofs reflective surface measures a Solar Reflective index of 100 and is U.S. EPA Energy Star certified. The solar modules applied directly over the roof membrane are CIGS thin film technology on a flexible substrate and are extremely light weight weighing 0.7 lb/ per square foot. The solar photovoltaic array covers almost 1,400 square feet of the roof and is adhered with adhesive allowing for very few penetrations.



DuPage County has begun a retro commissioning program using DCEO incentives. The first project was the JTK Administration Building. Implemented measures include duct static pressure reset, reduce fan speed on AHU's at night, implement a night temperature setback, close outside air dampers for night operation and adjust minimum damper position. The cost to the County to implement was \$10,000 producing \$60,081 in savings and a simple payback of 2 months.



DuPage County transitioned the existing data center to cutting edge technology utilizing 208V servers instead of 120V. This updated version operates more efficiently and effectively. The data center was enclosed to encapsulate the cooling energy within a smaller footprint. The units were fitted with a filtering hood system to minimize particulate matter entering the equipment which maintains the optimum operation and reduces dust related failures. The renovated data center is lit by LED fixtures with occupancy sensors.

8D. DuPage County Campus Recommendations

While DuPage County has made significant reductions in its energy consumption, the County recognizes that there is still opportunity to make improvements. The County will conduct energy assessments in the remaining buildings as necessary to maximize the efficiency of operations. When metering is installed, the County will track energy consumption in the U.S. EPA's ENERGY STAR Portfolio Manager system⁹. The benefits are two-fold; this will enable the County to benchmark its buildings against similar users and will open the door to apply for ENERGY STAR certifications on qualifying buildings. In 2013, the County worked with ComEd to provide a third-party assessment of four campus buildings – Convalescent Center, Administration Building, Central Plant and Jail B. Additional strategies that apply in multiple categories have also been included.

Strategy #1 - Building Envelope - Insulation, air sealing, windows, roofs, etc.

Continue the ENERGY STAR roofs as they need to be replaced. When windows require replacement, the County will install ENERGY STAR. As technology improves and maintenance becomes necessary, the County will make the choice for greener insulation products.

Strategy #2 - HVAC/Building Controls - Heating, venting, air conditioning and associated controls for the indoor climate

The campus utilizes a centralized plant to heat and cool campus buildings. The ComEd assessment made multiple recommendations about how and when to operate the HVAC system. Over the course of this initiative and as funding becomes available; the County will work on the following improvements:

- installing variable speed drives;
- convert hot water system to variable flow;
- mount demand ventilation controls in the kitchens;
- investigate retro-commissioning strategies to make all buildings operate as efficiently as designed.

Strategy #3 - Lighting – Indoor, exterior, street

The County will continually monitor technology advances in the lighting industry. The majority of the campus has been retrofitted where practicable. Several buildings require an entirely new lighting control system and will be considered if/when funding becomes available. Currently there is opportunity in the utility tunnel system to replace high pressure sodium fixtures and potentially install occupancy sensors. When additional opportunities are identified to replace fixtures or bulbs, the County will investigate the use of the most efficient bulb including, but not limited to, LEDs. This may include street lighting.

Strategy #4 - Competition/Reward – On campus and satellite locations

When metering and tracking becomes available, the County will start charging and tracking use by buildings. A building competition could be launched to encourage ongoing innovation in building efficiency. All County buildings that are eligible should obtain ENERGY STAR rating once the necessary data is metered.

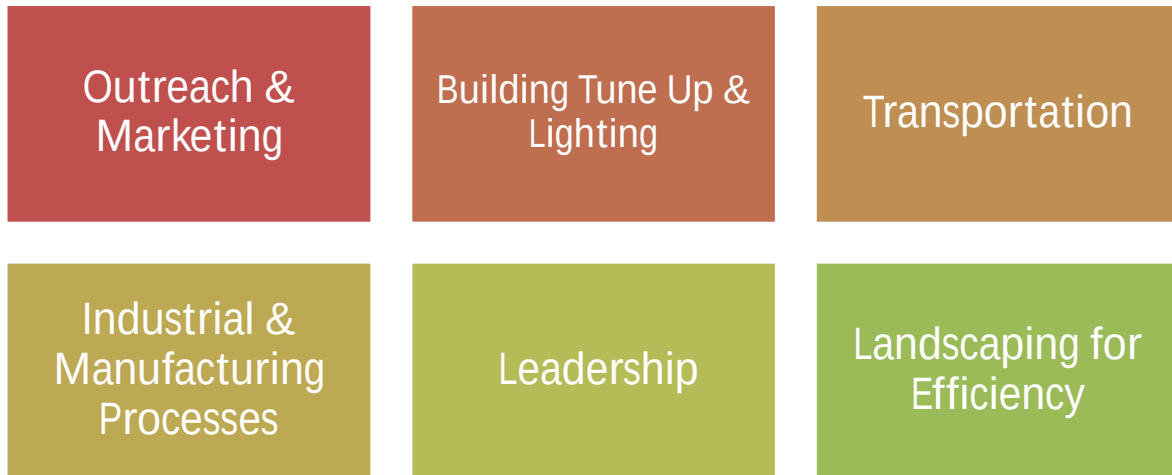
Strategy #5 - Review potential for the use of renewable energy

As the County gets lower on the hierarchy or when opportunities to be a pilot location become available, it will pursue renewable energy technologies. The County continues to monitor the potential for all sources of renewable energy and will address their feasibility on a case by case basis.

⁹ U.S. EPA Energy Star Portfolio Manager - user tracks energy & water consumption and GHG generated.

8E. Commercial Strategies

Commercial and industrial sites consume 40% of all energy and 71% of electricity produced in the United States. They also are responsible for 38% of the carbon dioxide emissions and 36% of all greenhouse gas emissions according to the U.S. Energy Information Administration. As such, the Green Government Council of DuPage County recommends the following strategies in working toward achieving the goals identified in the Cool Counties Initiative. From the following strategies, programs, workshops and other outreach based events will be developed to assist in the implementation. Additional projects may be pursued as opportunities become available.

**Outreach & Marketing Strategies**

The County should endeavor to educate small, medium and large commercial customers from varying industries about existing ComEd and Nicor Gas efficiency programs. Currently, both utilities have a vast array of programs that offer incentives toward energy efficient improvements. Some programs are supported by incentives and some by site design.

- Provide energy efficiency leadership in County government buildings & operations.
- Partner with ComEd, Nicor Gas and the Illinois Department of Commerce & Economic Opportunity (DCEO) to promote existing energy efficiency programs including assessments, incentives, rebates and loan programs. Serve as a liaison connecting users with these opportunities.
- Enhance the County's website to connect users with practical and implementable options.
- Develop case studies of successful commercial users for website and marketing material.

Building Tune Up & Lighting Strategies

Buildings can be recalibrated to operate in the manner in which they are being used. Many buildings are no longer used as they were originally constructed. Some start as large office areas and then turn into separated meeting spaces, storage and walled offices. As building use changes, they do not function as efficiently and HVAC systems may have to work harder to maintain air quality and temperature.

ENERGY STAR rated fixtures are available and can be utilized. To the extent practicable, commercial users should convert to energy efficient bulbs and fixtures. ComEd and DCEO operate incentive programs for users to lessen the financial impact of these types of conversions. Additionally,

energy efficiency companies offer performance contracting programs where the energy saved directly funds the capital investment. This type of approach can result in swift returns on investment.

The County can encourage municipalities to participate in the DCEO programs through the Smart Energy Design Assistance Center (SEDAC). SEDAC is available to conduct energy assessment that provide an expert evaluation of consumption and opportunities.

Transportation Strategies

This category maintains a diverse set of opportunities from land uses to traffic signal coordination. This plan encourages mixed use developments that include transit oriented designed downtowns with higher density residential homes.

The County has maintained a traffic signal coordination program when funding has been available which has saved millions of gallons of gasoline, money and time spent commuting. The County should continue to pursue close coordination between agencies for the efficient movement of traffic which also reduces avoidance of signals through longer trips. Businesses could incentivize employee ride share and/or mass transit options through preferential parking, gift cards or other types of recognition. The County has also implemented an alternative fuel fleet including compressed natural gas trucks, hybrids and electric maintenance carts. A dual electric car charging station was installed in 2014 for employees and the public.

Employers could incentivize carpooling and could participate in pre-tax public transit programs. The County should encourage businesses to seek out opportunities to connect to non-motorized transportation systems including trails, sidewalks and paths.

A few other strategies that employers could institute are telecommuting or alternative work schedules. Some private businesses may be able to pursue a 4 day work week allowing the building to shut down an additional day which has the added benefit of reducing on-road commuting traffic. These may not be viable options for some employers but should be considered when practicable.

Industrial & Manufacturing Processes

The County has previously partnered with the Illinois Sustainable Technology Center (ISTC) and the Illinois Manufacturing Excellence Center to audit manufacturers in the categories of energy, efficiency and economy. This program should be replicated as funding becomes available.

The County should support a 21st century energy efficiency workforce through partnerships with organizations like the Midwest Energy Efficiency Alliance to make training available to DuPage building operators.

Businesses can contact the utilities; a private energy efficiency company or ISTC to engage in energy assessments. Both ComEd and Nicor offer incentives but savings can also be derived from the private energy efficiency company and ISTC. The County can assist in outreach to connect DuPage businesses with these opportunities. Businesses can also work with private energy efficiency companies that can also provide energy assessments with return on investment information.

Leadership

The County's Regulatory Services staff will continue to enforce the State of Illinois Energy Code to ensure new and remodeled buildings meet the standards. The County could partner with the Better Buildings Challenge to host a local competition and could identify and host a best practices workshop to highlight successful commercial projects. The County has pursued varying levels of projects and will continue to share the pros and cons with inquiring entities.

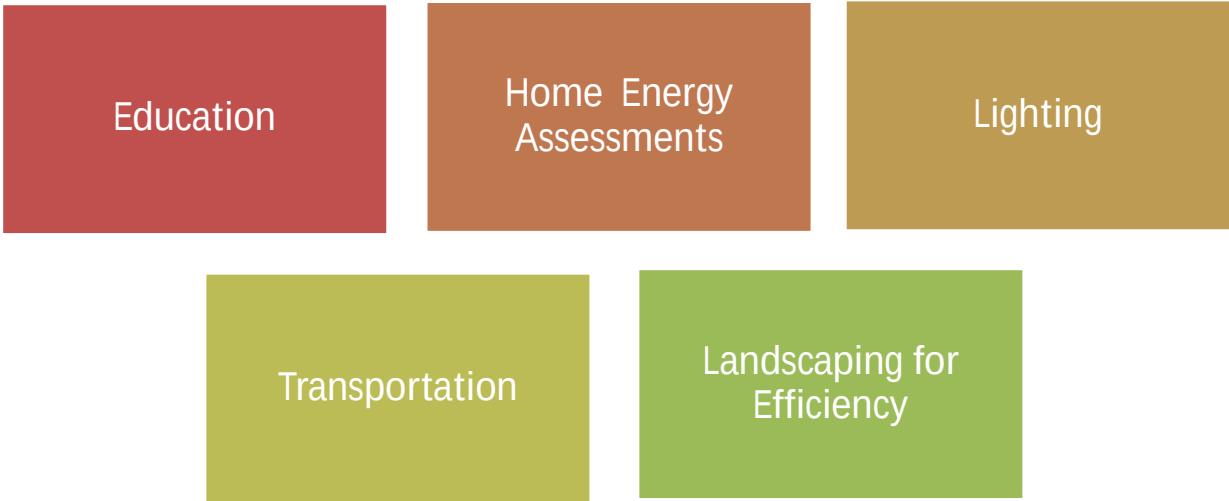
With the County's ongoing pursuit of efficiency, it will continue to serve as a role model for local government. Many projects have been completed with incentives and grant funding with minimal returns on investment. The County will continue to pilot new ideas and share lessons learned.

Landscaping for Efficiency

The County works closely with The Conservation Foundation to expand their Conservation@Work program which encourages commercial properties to reduce the amount of managed green lawn in their property. When possible, native landscaping should be used and wooded sites retained or regenerated to prevent the costly maintenance of chemicals, water and emissions used in typical lawn care. *Retrofitting Large Landscapes for Sustainability*, a guide developed by The Morton Arboretum, assists in these efforts and a link can be found on the County's website. Additional emission reduction strategies include; shaded parking areas, permeable pavers, and stormwater Best Management Practices (BMPs).

8F. RESIDENTIAL STRATEGIES

The EIA has announced that the average nationwide use of energy in households has shifted. For decades, the largest consumption was for heating and cooling, but their recent 2010 & 2011 poll found that appliances and technologies have taken over as the biggest draw. They attribute the shift to more efficient HVAC equipment, better insulation, more efficient windows and population shifts to warmer climates.



Education

DuPage County staff should work with local utilities to promote available incentives to residents geared towards improving their energy efficiency. Educational outreach programs on the topics of energy efficiency and conservation could be utilized in the outreach efforts. The County could conduct demonstrative projects to display sustainability practices to the public including, but not limited to, supporting their environmental education partnership with S.C.A.R.C.E. Participate in hardware stores educational promotions which highlight insulation opportunities and efficient lighting fixtures and bulbs.

The County should connect homeowners with existing ComEd, Nicor and Elevate Energy on energy efficiency programs through the use of education and the website.

Home Assessments

In cooperation with Nicor Gas and ComEd, the County should encourage residents to schedule home energy assessments. Nicor Gas and ComEd offer customers a free home energy assessment, which includes the installation of energy saving products such as a programmable thermostats and CFLs. The energy assessment also includes a customized report detailing additional ways to save.

In addition, Nicor Gas and ComEd offer rebates for energy efficient heating and cooling equipment, such as furnaces and central air conditioners. Residents may also qualify for significant rebates for weatherization improvements completed by a qualified contractor. ComEd also offers refrigerator and freezer recycling. Rebates and offerings are subject to change. The 2014/2015 program year is attached as Appendix A. New offerings are rolled out annually by both entities and offer significant return on investment.

Lighting

In contrast to the EIA date, ComEd conducted a study in 2012 in their service territory for residential customers and found that lighting consumed the most electricity at 19%. The nationwide trend has been toward the use of compact fluorescent lamps and with the cost of LEDs starting to become more competitive, the County should promote energy efficient lighting as a lower cost viable option. ComEd has offered in-store discounts on CFLs and LED lighting and maintains the Smart Ideas energy efficiency program which supports the purchase of low energy bulbs and fixtures.

Landscaping for Efficiency

A less well known solution that can be used in a residential setting is the location of an air conditioning unit. Most homeowners have not been given a choice in the location of the air conditioning unit and the preferred location is on the north side of the home where it receives the least amount of sunlight during summer months. A more viable technique for homeowners with existing construction is to provide trees or bushes to homes to decrease cooling loads/effective landscaping. Additional energy reduction actions include; adding deciduous trees, those that lose their leaves in the fall, on the west side of a house to reduce the direct sunlight in the summer months, reducing energy usage to cool a house, and providing direct sunlight in winter months to aid in heating a house. An evergreen hedge row away from the house but placed on the north side assists in blocking wind during the winter months. These planting strategies have the added benefit of carbon storage within the tree or bush. The County will continue to communicate this as a low cost and practical activity to reduce residential consumption and assist with providing links to the Arbor Day Foundation's Energy-Saving Trees website. Again, additional resources can be found at the Morton Arboretum and The Conservation Foundation's Conservation@Home program.

Transportation

DuPage County is currently serviced by two different Metra train lines and has Pace bus service in locations throughout the County. These mass transit options can aid the County in reducing vehicle miles travelled. Some additional recommendations include living in a walkable/bikeable community. Many DuPage developments are situated far from grocery stores and schools. The new trend is to utilize transit oriented design when developing to increase convenience and minimize traffic.

The County is home to more than 500 miles of trails & bikeways that are an integral part of our identity and a valued amenity for runners, cyclists, and nature lovers. The trail system connects residents from all corners of the county to popular destinations and public transit stations. Trails serve as an

alternative corridor for non-motorized transportation, providing those who wish to reduce automobile travel with a safe, alternative means of transportation. Most residents can easily bike to nearby communities, shopping centers, Metra stations, museums, parks and forest preserves. In fact, more than 75 percent of residents live within 1 mile of the regional trail system. Since most suburban trips are less than 2 miles, having popular destinations accessible from residential neighborhoods via bicycle and pedestrian facilities allows people to live a less car-dependent lifestyle.

The County maintains mobile apps and a trail mapping software (GoBike) to assist non-motorized traffic in getting places. Residents should be encouraged to walk or bike whenever practicable and safe.

Another solution to reduce vehicle traffic is to organize traveling in a manner to reduce on-road time. When parking is located in a centralized area, it enables drivers to stay parked and visit multiple locations. Tele-work options could be pursued by employees and carpooling is always encouraged. Modifying work schedules to avoid traveling during peak times can also aid in emissions due to congestion.

9. CONCLUSION

Over the next 15 years, DuPage County will continue to push forward with an energy savings plan that makes sense while having a lasting impact on our air quality. The aforementioned strategies will serve as the roadmap to implement these lifestyle and business operation changes. Periodic measurements will be taken to measure our achievements. With an entire county participating, we can meet and exceed these goals.

GLOSSARY OF ACRONYMS IN THE DOCUMENT

ACEEE	American Council for an Energy Efficient Economy
AHU	Air Handling Unit
Btu	British Thermal Unit
CBECS	Commercial Building Energy Consumption Survey
CHP	Combined Heat and Power
CNT	Center for Neighborhood Technology
DCEO	Department of Commerce and Economic Opportunity (Illinois)
DOE	U.S. Department of Energy
GGC	DuPage Green Government Council
GHG	Greenhouse Gas
HVAC	Heating Ventilation Air Conditioning
IDOT	Illinois Department of Transportation
IL EPA	Illinois Environmental Protection Agency
JTK	Jack T. Knuepfer (Administration Building)
kWh	Kilowatt Hour
LED	Light Emitting Diode
LEED	Leadership in Energy & Environmental Design
MLS	Multiple Listing Service
MMCF/d	Million Cubic Feet per Day
MMT	Million Metric Tons
PACE	Property Assessed Clean Energy
SCARCE	School and Community Assistance for Recycling and Composting Education
SUV	Single Use Vehicle
US EIA	United States Energy Information Administration
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
VMT	Vehicle Miles Traveled

LIST OF APPENDICES

The documents below are provided as background to the development of this plan in addition to providing case studies and opportunities to the reader.

Appendix A - ComEd 2014/2015 Programs

Appendix B - Nicor Gas 2014/2015 Programs

Appendix C - IL Dept. of Commerce & Economic Opportunity 2014 Program

Appendix D - Case Studies (Nicor Gas, ComEd, Johnson Control, Siemens, TRANE)

Appendix E - Elevate Energy 2007-2012 Emissions Data (fka CNT Energy)\

Appendix F - DuPage County Board Resolution EN-0001-12
Resolution of Commitment to Sierra Club Cool Counties Program

Appendix G - The Morton Arboretum's Northern Illinois Species List and Tree Selector

APPENDIX A

ComEd 2014/2015 Energy Efficiency Programs

Í Ó ß Î Ĳ Ü Ü Í Ú Ń Ĭ Č Ň Ě Ĥ Þ Ė Ĳ Ö Ū Í Ĳ
Ö Ÿ Ů Ò Ĳ Ê Ũ Đ ĩ Ñ Ů Ĭ ß Ó Ĳ

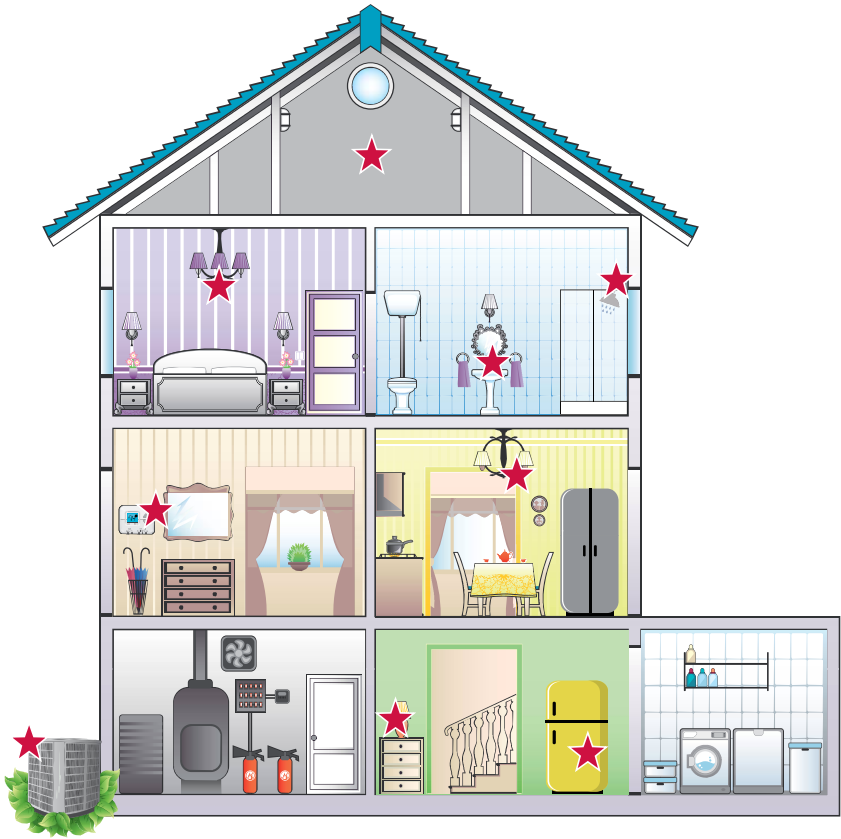
Ö«²» îô îđï ñ, ®±«¹, Ó¿§ í îô îđïë

[illegible]

smart ideas

ČŇĚŽĚŮ ŮŇĚ ĬŮŮ ĐNEŮ ĬŇĚŮ

É»Źa» 1±ŋŋ, » .1/4»Ĵ - ŋ±ŋ, »'°



Take advantage of these **money** and **energy-saving** programs:



LIGHTING DISCOUNTS

Instant in-store discounts on select ENERGY STAR® certified light bulbs. Look for the ComEd "Lower Price" sticker at participating retailers.

HOME ENERGY REBATES

Rebates for installation of qualifying, high-efficiency equipment and services, such as weatherization and central air conditioning systems.



HOME ENERGY ASSESSMENTS

FREE energy assessments including installation of energy-saving products and customized energy-efficiency recommendations.



FRIDGE & FREEZER RECYCLING

ComEd offers FREE pick up and recycling of old, working refrigerators and freezers, and will also pay you for participating.

CENTRAL AC CYCLING

Bill credits of up to \$40 for allowing ComEd to remotely and safely turn the compressor off and on for brief periods during times of high demand for electricity.

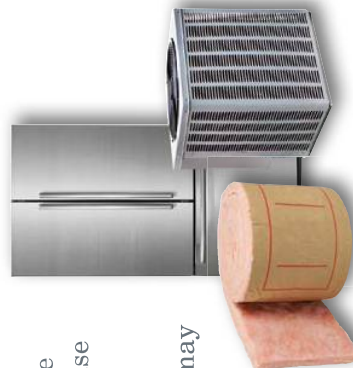


MULTI-FAMILY ENERGY SAVINGS

Tenants of multi-family buildings should encourage their landlord to call 855-IDEAS-00 to schedule the installation of FREE energy-saving products.

ENERGY EFFICIENCY LOANS

Energy Efficiency Loans provide special financing for the purchase and installation of qualified energy-efficiency products and services. Eligible homeowners may apply. Your loan payment is conveniently added to your monthly electric bill.



For more information, visit ComEd.com/HomeSavings or call 855-IDEAS-00 (855-433-2700).

Ô»¿®² ³ ±®»ò Í¿ª» ³ ±®»ò

Ì.º- ± Í¿ª» Û²»®¹§

Ê...- Ý±³ Û¼÷½±³ ñØ±³ »Í¿ª.²¹- °±®'±©ó½±-ò ²±ó½±-»
»²»®¹§ -¿ª.²¹- ¯.º-ò

Ó§ Û²»®¹§ Ì±±'-

Ñ²'.²» ¿½½»-- ±±, ±³ » «-¿¹» ½±³ °¿®.-±²-ò
.²º±³ ¿±.±² ±² ©, .½, .»³ - .² §±«® , ±³ » «-»
», »³ ³±-»²»®¹§ ¿²¼ °»®-±²¿'.|»¼ ©¿§- ±±-¿ª»
Š¿' ¿ª¿.¿¼» ©, »² §±«'±¹ .² ±± §±«® ±²'.²»
¿½½±«²-¿ ¿-Ý±³ Û¼÷½±³ ñÓ§ß½½±«²-ðò

öÊ¿½, °±®», »²»©ª»®-±² ±º §±«® Ý±³ Û¼÷½±³ ±²'.²» ¿½½±«²-¿ ¿²¼
»², ¿²½½±³ ±¼.¿ ¿½½»-- ±±, »-»¹®¿-»²»®¹§ó ¿²¿¹»³ »²-¿±±'-ò



Ô»¿®², ±© Ý±³ Û¼¿- Û²»®¹§óÛº.½.»²½§ Ð®±¹¿¿³ -
½¿²-¿ª» §±«³ ±²»§ò Ê...- Ý±³ Û¼÷½±³ ñØ±³ »Í¿ª.²¹-
±® ½¿' èèèó×ÛÛß Íóðð øèèèò Ì Í Íóôéðð÷



ComEd
An Exelon Company

powering lives

w Ý±³ ³±²©»¿-¿, Û¼-¿² Ý±³ °¿²§ ìðì
Í³ ¿®-×ì¿¿-¿' °è±¹¿¿³-¿® °ª²ì¿½¿§ Ý±³ Û¼¿ª«-¿³ »®-² ì±³ °¿-¿²ì¿©-¿, ×'-²±-¿¿©
Ó«-¿½¿ ¿Ý±³ Û¼¿®-¿ì²-¿'½¿.ª»§ -»®ª-ì¿ª«-¿³ »®-¿ °¿®-¿-¿¿¿¿
Ñ-, »®ª'-¿½¿-¿®ª-¿ª²-¿ ¿§¿°§ Ðè±¹¿¿³-¿®ª-¿ª²ì¿¿¿¿¿¿¿¿¿¿
ì·ðì ÑÛìßÓ×ÛÑÓÛðèì

APPENDIX B

Nicor Gas 2014/2015 Energy Efficiency Programs



Find your path to energy efficiency

»²»¹ξ Í Ó β Î Ì ½ζ² , »° ξ±« γζμ» -»²-¾» -γ»° - γ± - ³ ζγ - ζª,21-

 $\beta \rightarrow -\infty$
$$\ddot{E}^{21/4} \gg \gamma \zeta^{21/4} \S \pm \ll \pm^{\circ} \pm \ll^{2, \gamma} \gg - \gamma \pm - \zeta^a \gg \gg^2 \gg^1 \S$$
[illegible]
$$\dot{U}^{(R)} \gg \omega^{(R)} \pm 1/4 \ll 1/2 \gamma -$$
$$\hat{I}_{\gamma} \hat{I}_{\gamma}^{\otimes 1} - \hat{I}^{a,2,1} \gg^2 \gg^{\otimes 1} \hat{\mathfrak{S}}_{\pm}^{2,2} \hat{\mathfrak{S}}_{\pm}^{\pm 3} \gg \gamma^{\pm 1/4} \hat{I}_{\gamma} \hat{\mathfrak{S}}$$
[illegible]

1. $\hat{I} \gg^{3/4} \hat{J}$; $\gamma \gg -$

$$\hat{1} \gg \circ' ; \frac{1}{2} \gg \S \pm \ll \textcircled{\text{R}} \gg ; \gamma, 2^1 \gg \overline{\ll} \cdot \circ^3 \gg 2 \gamma ; \frac{21}{4}, 2 - \ll' ; \gamma \gg \S \pm \ll \textcircled{\text{R}} ; \gamma, \gamma, \frac{1}{2}$$

and installation of qualified high-efficiency equipment, including attic insulation,

 $\hat{O}_{\pm}^2 -$

Loans to help cover your energy efficiency project

Financing is available to cover the cost of energy efficiency equipment and


$$\hat{E}_{\dots}^{2.1/2\pm\otimes 1}\zeta^{-\otimes 3/4}\zeta^{-\otimes 1/2\pm 3}\pm\otimes 1/2\zeta''$$

$$\text{èèèèèèèèèè}\hat{\imath}\hat{\imath}\zeta^{-\otimes 2}\pm\otimes 3\pm\otimes 0$$



Óζμ·² 1 »²»[®] 1 § - 3 ζ[®]»[®] 0±[®] ¾«-.² »--

Ůζ[®] 2 ½ζ-, .2½»²·a»- ©, »² §±« 3 ζμ» 2ζ«[®]ζ' 1ζ-ó-ζ^{a,2} 1 .2a»-γ 3 »²γ-



β--»-- 3 »²γ-

ρ«·¼² 1 »^aζ'«ζ·±²- §»¼-ζ^{a,2} 1-

Ý±³ °'»» ζ² ζ--»-- 3 »²γ±⁰ §±«[®] ¾«·¼² 1 ζ^{2¼} ½»½»a» ζ[®] °±[®] ©γ, -«¹ 1»-γ»¼
»²»¹ §0-ζ^{a,2} 1 .3 °±a» 3 »²γ-. 2½«¼² 1 ½ζ'½«'ζ»¼-ζ^{a,2} 1-ô »-γ. 3 ζ'¼½±-ô
ζ^aζ'¾¼» .2½»²γa»-ζ^{2¼} ° §¾ζ½μ °»±¼ô Ů±³ -3 ζ'¾«-.2»--ζ--»-- 3 »²γ-ô
±±°°±«²·§ ζ--»-- 3 »²γ- 0±[®] ζ¹»[®] ¾«-.2»--ζ^{2¼} 0½ζ'·§ ζ--»-- 3 »²γ-
for industrial customers, you're sure to find the assessment that best fits your
¾«-.2»--ô



Î»¾ζγ»-

Replace your natural gas equipment with energy efficient models

Ë° ± üëöööö .2 ½ζ-, ½¾ζγ»- ζ[®] ζ^aζ'¾¼» 0±[®] γ, » «[®]½ζ, ζ-»^{2¼} .2-γζ'γ±² ±⁰
qualified high-efficiency equipment. We have rebates for every type of business
ζ^{2¼} 3 «'γôζ 3 '§¾«·¼² 1ô .2½«¼² 1 »ζγ² 1 »«° 3 »²ô ½±³ 3 »½ζ' μ·½, »²
»«° 3 »²γ ζ^{2¼} -3 ζ'»[®] .3 °±a» 3 »²γ- -«½ζ, ζ-¾±'»[®] γ«²ô«°-ζ^{2¼} -γζ 3 ½ζ°-ô



Ů[®]»» °±¼«½γ-

Đ±¼«½γ-±γ, »° §±«-ζa»ô γ²±½±-γ± §±«

Íγ[®] γ-ζ^{a,2} 1 ±¼ζ § ©γ, 0»» °±⁰»--±²ζ'§ .2-γζ'»¼ »²»¹ §0-ζ^{a,2} 1 °±¼«½γ-ô -«½ζ,
as pipe wrap, water heater setback controls and low-flow showerheads, available
0±[®] -3 ζ'¾«-.2»--ζ^{2¼} 3 «'γôζ 3 '§ °±⁰»γ»-ô



Ñ°γ. 3 .!ζγ±²

Ì«²ô«° §±«[®] »«° 3 »²γ± ¾±±-γ °»±⁰ 3 ζ^{2¼}»

ρ«·¼² 1 ±°γ. 3 .!ζγ±² -»a·½»-γ, »° ½±³ 3 »½ζ'ζ^{2¼} .2¼«-ôζ' 0½ζ'γ»-¼»²γ°§ ±©
and no-cost ways to improve efficiency of existing systems to achieve optimum
efficiency. Team up with our energySMART engineers to tune up your existing
»«° 3 »²γ ζ^{2¼} ½ζ, »a» γ, ¾«-γ °»±⁰ 3 ζ^{2¼}»ô



Ý«-γ±³

Î»¾ζγ»- ½«-γ±³ .!¾¼ 0±[®] §±«[®] ¾«-.2»--

Ý«-γ±³ .2½»²γa»-ζ[®] ζ^aζ'¾¼» ±¾«-.2»--γ, γγ .2-γζ'»«⁰§.2.1 »²»¹ §
efficiency projects that are not eligible for rebates through other offerings. To qualify
0±[®] .2½»²γa»-ô 0±[®]½γ- 3 «-γ¾«° »ôζ °±a»¾¼ ½±²γ½γ«-¾«°±[®] §±«¹ γ-γζ»¾ô



Ê--γ 2.½±[®] 1 ζ-®»¾ζγ»-ô½±³ ±[®] ½ζ'
èèèèèèèèîîíç ±'»ζ[®] 2 3 ±[®]»ô

APPENDIX C

IL Dept. of Commerce & Economic Opportunity Energy Efficiency Programs



Illinois Department of Commerce & Economic Opportunity

Pat Quinn, Governor

Illinois Energy & Recycling Office Programs January 2014

The Illinois Energy Office demonstrates economic development benefits, including job creation, of energy efficiency, renewable energy, and recycling through a variety of programs and services. Further, Office programs demonstrate that economic development, sustainable energy, recycling practices, and environmental protection go hand in hand.

In addition, the Office continues to promote the leadership of the State of Illinois, through its own energy and recycling policies and practices at state facilities. Individually tailored programs are available to assist Illinois citizens, communities, non-profit organizations, businesses, industry, and other government agencies in an effort to achieve the Offices' mission.

Energy Efficiency Programs: Illinois Energy Now

Under Public Act 95-0481, DCEO, ComEd, and Ameren Illinois have developed and sustained a portfolio of electric energy efficiency programs to achieve certain annual energy savings goals. Over \$55 million is available for the DCEO electric Illinois Energy Now programs. DCEO is responsible for 25% of the total portfolio and the utilities 75%. DCEO will utilize approximately 58% of funds on public sector programs, 24% on low income programs, and 10% on market transformation programs. ComEd and Ameren Illinois electric portfolio programs will be focused on residential, commercial and industrial sectors.

The Natural Gas Energy Efficiency Program authorized by Public Act 96-0033 started June 1, 2011. Over \$25 million is available for incentives to the public sector and low income sector. DCEO is offering an integrated natural gas and electric portfolio. Ameren Illinois, Nicor, Peoples and North Shore natural gas companies offer natural gas energy efficiency incentives to the commercial, industrial, and residential sectors.

A. Public Sector Electric and Natural Gas Efficiency

The following energy efficiency programs are offered to the Public Sector:

- Local Government (county, township, municipal, public safety, water and park districts)
- Public K-12 Schools
- Community Colleges
- Public Universities
- State and Federal Government

1. Standard and Custom Incentive Programs

The Standard and Custom Incentive Programs provides grants and rebates to public sector entities for electric and natural gas system efficiency improvements. The Standard Incentive Program provides set incentive levels for common retrofits for lighting, HVAC, variable

frequency drive controls, motors and refrigeration. The Custom Incentive Program provides incentives for electric and natural gas efficiency improvements not listed in the Standard Incentive Program.

Website: www.ilenergynow.org

Contact: Sally Agnew, 217-785-5081, Sally.Agnew@illinois.gov

2. New Construction Program

The New Construction Program provides grants to public sector entities to encourage applicants to design new or rehabbed buildings to achieve the greatest level of energy efficiency. The program offers \$/square foot incentives for facility design improvements beyond code, with incentive levels increasing for additional percentages beyond code. Estimated electricity and natural gas savings must be documented by energy modeling and/or supporting calculations. This program is administered by the Smart Energy Design Assistance Center (SEDAC) at the University of Illinois.

Website: <http://smartenergy.illinois.edu/new-construction-incentive-program.html>

Contact: Kristine Chalifoux, 217-244-1315, kmchalif@illinois.edu

3. Retro-commissioning Program

The Retro-commissioning Program provides funding to identify and implement low cost tune-ups and adjustments that improve the efficiency of existing public buildings' operating systems by returning them to intended operation or design specifications, with a focus on building controls and HVAC systems. Retro-commissioning services will be delivered through a network of commissioning providers that have been trained in program protocols and participation processes. This program is administered by the Smart Energy Design Assistance Center (SEDAC) at the University of Illinois.

Website: <http://smartenergy.illinois.edu/retro-commissioning.html>

Contact: Ashley Collins, 312-267-2864, Ashley@360eg.com

4. Lights for Learning Fundraiser

The Illinois Lights for Learning Fundraiser is a unique educational opportunity for Illinois students to earn money for their school or organization by selling money saving, energy efficient Compact Fluorescent Light bulbs (CFLs). Participating schools keep 50% of the proceeds, and presentations are provided to educate students and their community about the environmental and financial benefits of using CFLs. This program is administered by the Midwest Energy Efficiency Alliance (MEEA).

Website: www.lights4learning.org

Contact: Bruce Selway, 217-785-2023, Bruce.Selway@illinois.gov

5. Self-Directing Customer or Exempt Customer

Customers seeking to be designated by the Department as a self-directing customer (SDC) or as an Exempt Customer under the Natural Gas Energy Efficiency Programs shall submit an application on or before February 1, 2010. A new customer that commences taking service from a natural gas utility after February 1, 2010 may apply up to 30 days after beginning service. Thereafter, applications may be made not less than 6 months before the triennial filing date of the gas utility energy efficiency plans.

Website: www.ilenergynow.org

Contact: Wayne Hartel, 217-785-3420, wayne.hartel@illinois.gov

B. Low Income Energy Efficiency programs

1. Energy Efficient Affordable Housing Construction Program

DCEO believes that affordable housing must be energy efficient to be truly affordable. DCEO has led this effort through the Illinois Energy Efficient Affordable Housing Program initiated in 1988. Under this Program, grants are provided to Illinois based non-profit and for-profit housing developers to include energy efficient building practices in the rehab or new construction of affordable housing units. Average energy savings range from 50% to 75%.

Website: www.ilenergynow.org

Contact: Don Falls, 217-785-1997, don.falls@illinois.gov

2. Residential Retrofit

This program provides funding to leverage existing low income weatherization and home improvement programs to maximize electricity savings. DCEO will partner with Program Implementers such as state agencies, local government, lending institutions, housing authorities, and affordable housing developers for direct installation or funding of electric efficiency measures in low income households. This program is part of the Illinois Energy Efficiency Portfolio.

Website: www.ilenergynow.org

Contact: Ed Hosey, 217-785-3984, Ed.Hosey@illinois.gov

3. Efficient Living: Illinois Public Housing Authority Energy Program

This program provides funding for electric and gas efficiency measures in buildings owned and managed by Public Housing Authorities to reduce energy consumption and utility costs while maintaining affordable, comfortable homes for residents.

Website: www.ilpha.org

Contact: Kate Brown, 217-244-6769, cbrown4@illinois.edu

C. Market Transformation: Technical Assistance, Education and Training

1. Building Industry Training and Education (BITE) Program

This program provides funds to organizations to train professionals from all aspects of the building industry in energy efficient practices and about energy efficient products and equipment, in order to develop the robust energy efficiency services market necessary to achieve the energy savings goals in future years. Grantees will organize and coordinate workshops and training for all sectors throughout the state in order to educate the industry on state of the art energy efficiency practices for building construction, rehab, operation, and maintenance. This program supports efforts such as the Illinois Energy Conservation Code for Commercial and Residential Building training, Illinois Home Performance with Energy Star(IHWES) training, Building Performance Institute (BPI) training and the Building Operator Certification (BOC) program.

Website: www.ilenergynow.org, www.ildceo.net/energycode
Contact: Bruce Selway, 217-785-2023, Bruce.Selway@illinois.gov

2. Smart Energy Design Assistance Center (SEDAC)

DCEO partners with SEDAC, housed within the University of Illinois School of Architecture, to provide technical assistance services to businesses, federal, state and local government, public schools, community colleges, public universities and colleges to assist clients who are considering energy efficiency improvements at existing facilities or to enhance baseline design of new facilities.

Website: www.SEDAC.org
Contact: Kristine Chalifoux, 217-244-1315, kmchalif@illinois.edu

3. Energy Performance Contracting Program

Energy Performance Contracting is an innovative arrangement for designing, installing and financing energy improvement projects where the savings achieved by the project are guaranteed to amortize the cost of the project over the term of the agreement.

Website: www.ilenergynow.org
Contact: Wayne Hartel, 217-785-3420, wayne.hartel@illinois.gov

Renewable Energy Programs

Illinois boasts significant potential for renewable power and heating: wind, solar and biogas offer both economic and environmental benefits. DCEO administers the Renewable Energy Resources Program (RERP) to foster investment in and the development and use of renewable energy resources within the state of Illinois. DCEO strongly believes that the facilitation of such investment in renewable energy projects in Illinois brings strong economic development benefits to the state: new income streams for farmers, new jobs, new investment, and new property tax revenues for local governments.

A. Solar and Wind Energy Rebate Program

The focus of the Solar and Wind Energy Rebate Program, through the State's Renewable Energy Resources Program, is to encourage utilization of smaller-scale solar and wind energy systems in Illinois. Eligible applicants include homeowners, businesses, public sector and non-profit entities that are customers of an electric or gas utility that impose the Renewable Energy Resources and Coal Technology Development Assistance Charge. Maximum rebates for all solar and wind energy projects are \$10,000.00 for homeowners, \$20,000 for businesses, and \$30,000 for public sector and non-profit entities. Maximum percentage and per watt caps also apply. Please refer to the website for details.

Website:

<http://www.illinois.gov/dceo/whyillinois/KeyIndustries/Energy/Pages/RenewableEnergy.aspx>

Contact: Wayne Hartel, 217-785-3420, Wayne.Hartel@illinois.gov

B. Large Distributed Solar and Wind Grant Program

The focus of the Large Distributed Solar and Wind Grant Program is to support the development and implementation of larger-scale distributed solar thermal, solar photovoltaic, and wind energy systems in Illinois. Eligible applicants include businesses, public sector and non-profit entities that are customers of an electric or gas utility that impose the Renewable Energy Resources and Coal Technology Development Assistance Charge. The maximum grant amount allowed under this program is \$250,000.

Website:

<http://www.illinois.gov/dceo/whyillinois/KeyIndustries/Energy/Pages/RenewableEnergy.aspx>

Contact: Wayne Hartel, 217-785-3420, Wayne.Hartel@illinois.gov

Recycling and Waste Reduction Programs

DCEO's Recycling programs support the very relevant public policy concern of sustainable economic development by effectively addressing environmental challenges and business competitiveness issues, while offering public economic benefits such as job creation.

DCEO's Division of Recycling and Waste Reduction provides technical assistance and access to capital for projects involving source reduction, waste reduction, recycling and reuse. DCEO's efforts help the Illinois recycling industry continue to expand, enhancing statewide economic growth while helping Illinois businesses; schools, local governments and not-for-profit organizations advance their waste reduction and recycling initiatives.

A. Illinois Recycling Grants Program (IRGP)

Through a competitive process, the IRGP concentrates on projects that develop or expand recycling collection and processing efforts in Illinois. A priority goal of the program is to reduce the amount of recyclable commodities entering the municipal solid waste stream while maximizing the economic benefits of recycling, including job creation. While most funding from this program has historically supported "traditional (fiber, plastic, metal, and glass) recycling" efforts such as curbside and drop-

off recycling, the program has the flexibility to also seek applications designed to target specific non-traditional recyclables. For example, over the past several years the program solicited and funded projects that capitalized on the economic benefits associated with the development of an infrastructure in Illinois to collect and process computer and other electronic discards.

Grants are available to assist local governments, for-profit, and not-for-profit businesses and organizations with their recycling efforts. Grant funds may be used to purchase project-related capital equipment such as collection, processing or handling equipment and project-related expansion and modernization costs.

Website: www.illinoisrecycles.com

Contact: David Ross, 217-782-7887, David.Ross@illinois.gov

B. Recycling Expansion and Modernization Program (REM)

The REM Program provides funding for projects that involve a) improving an organization's solid waste management practices through source reduction and waste reduction, including recycling and reuse activities; b) improving product packaging practices to reduce waste; and c) modernizing and expanding a business that manufactures recycled content products. While the REM Program regularly funds numerous successful projects, the demand for REM services continues to increase as Illinois organizations tout the benefits (both environmental and business performance) of improved waste management practices and increased recycling. REM grant funds (from \$10K to \$250K) can be used for capital equipment and/or consultant services.

Waste Management Modernization project grants provide funding for a business or organization that plans to improve its approach to solid waste management through modernization activities. Projects involve best practices in solid waste management including (a) source reduction activities that prevent the generation of solid waste, and (b) waste reduction activities that recycle or reuse industrial byproducts or other solid waste materials.

Market Expansion Modernization project grants provide funding to modernize key functions in a business or organization that manufactures recycled-content products or uses recyclable commodities in providing a service. The purpose is to increase the use of recyclable commodities, thereby expanding markets for these materials. Projects may also involve technical issues that are unique for companies planning to convert their operations to use recyclable commodities in manufacturing or service delivery.

Website: www.illinoisrecycles.com

Contact: Mike Motor, 217-524-5859, Michael.Motor@illinois.gov

C. Food Scrap Composting Revitalization & Advancement Program (F-SCRAP)

The DCEO commissioned report, Illinois Commodity/Waste Generation and Characterization Study (May 2009) revealed that food scraps are the single largest material category of municipal solid waste (MSW) landfilled in Illinois. In fact, food scraps, generated from such diverse sources as households, grocery stores, farmer's markets, restaurants, college dining facilities, and food packaging operations account for 12% of all MSW landfilled in Illinois. This fact, coupled with

Governor Quinn's recent signage of Public Act 96-418 that relaxes how food scrap composting facilities are regulated, are the genesis for this new program.

Composting has been shown to create up to 4 times as many jobs as landfilling the same amount of material and could help businesses and institutions reduce their waste disposal costs. This new initiative solicits projects that will advance Illinois' food scrap composting infrastructure. DCEO may award grants up to \$125,000 to any one project and grant funds may be provided to support cost related to project necessary equipment and/or site improvements.

Website: www.illinoisrecycles.com

Contact: David E. Smith, 217-785-2006, David.E.Smith@illinois.gov

Alternative Transportation Programs

A. Alternate Fuel Research and Infrastructure Grant (AFRIG) Program

This grant program funds ethanol fuel research and alternate fueling infrastructure (for E85 blend, propane, at least 20% biodiesel blending fuel, and compressed natural gas) to promote the use of alternate fuel in vehicles as a means to improve air quality in the State and to meet the requirements of the federal Clean Air Act Amendments of 1990 and the federal Energy Policy Act of 1992. The minimum grant award is \$25,000, and the maximum grant award is \$350,000.

Website: www.illinoisenergy.org

Contact: Rajiv Narielwala, 217-785-2638, Rajiv.Narielwala@Illinois.gov

B. Electric Vehicle (EV) Infrastructure Rebate Program

The purpose of this rebate program is to encourage the installation and utilization of a network of electric vehicle charging stations throughout the state. Eligible applicants include units of government, businesses, educational institutions, non-profits, and individual residents. Rebates cover 50% of equipment and installation (materials and labor) costs up to certain maximum caps; please refer to the program website for details.

Website: www.illinoisenergy.org/ev

Contact: Kate Tomford, 312-814-1985, kate.tomford@illinois.gov

C. Electric Vehicle (EV) Industry and Infrastructure Development Grant Programs

These programs fund projects that support the production and deployment of electric vehicles and electric vehicle charging stations, or their components, such as batteries. Eligible expenditures include the purchase and installation of machinery, equipment and new industrial systems and/or the conversion and improvement of existing processes.

Website: www.illinoisenergy.org/ev

Contact: Kate Tomford, 312-814-1985, kate.tomford@illinois.gov

APPENDIX D

Case Studies

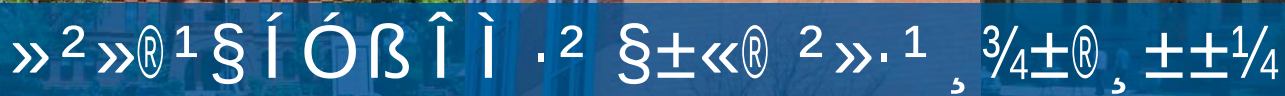
Nicor Gas – *Marianjoy Rehabilitation Hospital, Nation Pizza and Foods, Wheaton College, Adventist Hinsdale Hospital*

ComEd – *Adventist Hinsdale Hospital, Thorntons LED Lighting Project*

Johnson Controls – *University of Hawai'i Community Colleges, Middleton-Cross Plains Area School District*

Siemens – *Woodland Primary School, Adlai E. Stevenson High School*

TRANE – *Hopital Cite de la Sante, Gunderson Health System*



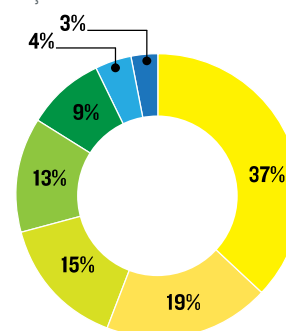
Packet Pg. 149



Packet Pg. 150



Ô.¹,₇.²1 ħ^{1/2}±«²7-⁰±®
 íé[°]®^{1/2}»²7±⁰»¹»^{1/2}7-®.^{1/2}7-Œ«-»^{1/4}
 .²7,» ħ^a®;¹» ©(®)»,±«-»ð

[illegible][illegible]
$$\left[\pm \langle \frac{1}{2} \rangle \right] \ddot{E} \dot{0} \dot{0} \dot{0}^2 \rangle \rangle^1 \xi x^{20 \pm \rangle^3} \dot{\gamma} \cdot \pm^2 \beta^{1/4} 3 \cdot 2 \cdot \cdot \gamma \dot{\gamma} \cdot \pm^2$$
[illegible][illegible][illegible]

$e \hat{O} \gg \odot \pm \mathbb{R} \gg \circ' \hat{z} \frac{1}{2} \gg 3 \gg 2 \neg \hat{1} \hat{0}^{\circ}, \hat{z} - \gg \hat{1}$
 $, .1, \hat{0}^{\circ} \gg \overline{\ll} 2 \frac{1}{2} \S \frac{3}{4} \hat{z} \neg \neg \mathbb{R} \S \frac{1}{2}, \hat{z}^{\mathbb{R} \hat{1}} \gg \mathbb{R} -$
 $\hat{0} \pm \mathbb{R} \gg \frac{1}{2} \neg \mathbb{R} \cdot \frac{1}{2} a \gg, \frac{1}{2}' \gg -$

ΟΥΒΙΕΤΙΟΥ ΧΘΘΟΥΘΟΥΙΟΥ
 → ΟΟΥΙ Ιε 2¼ Ιε 0:~«Θ»-Δ ~.~.~.12-
 ΙΝΙΒΘΘΙΝΘΟΥΙ ΥΝΙΙ
 → υιιιιιι
 ΟΥΙΧΘΒΙΟΥ ΒΘΘΘΒΘ ΟΟΥΙΥΘ ΙΒΕΧΘΥΙ
 → 196,982 kWh
 ΟΥΙΧΘΒΙΟΥ ΒΘΘΘΒΘ ΥΝΙΙ ΙΒΕΧΘΥΙ
 → \$14,774*
 ΙΘΒΤΙ ΧΘΥΙ ΧΘΥΘΙΧΘ ΙΥΥΧΘΥΙ
 → \$14,190
 ΟΥΙΧΘΒΙΟΥ ΘΒΘΒΒΥΘ ΘΥΙΧΘ
 ΕΧΙΘΘΕΙ ΙΘΒΤΙ ΧΘΥΙ ΧΘΥΘΙΧΘ
 → ΙΘΘ\$~
 ΟΥΙΧΘΒΙΟΥ ΘΒΘΒΒΥΘ ΘΥΙΧΘ
 ΕΧΙΘ ΙΘΒΤΙ ΧΘΥΙ ΧΘΥΘΙΧΘ
 → 1.9 years

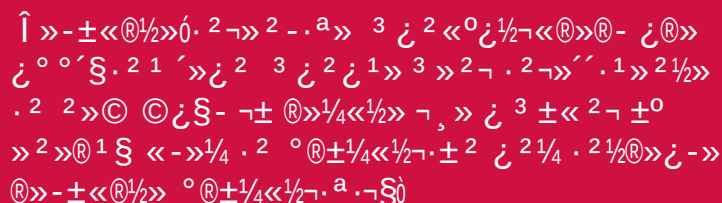
ΟΥΒΡΙΕΪΤΙ ΧΘΘΘΟΘΘΙΘΥ
 → $l\theta^{\circ} \cdot \ll \otimes \gg \otimes \pm \frac{1}{2} \ll \otimes \gg^{\circ} ; 2 \frac{1}{2} S - \gg^2 - \pm \theta$
 ΟΥΒΡΙΕΪΤΙ ΧΘΘΘΟΘΘΙΘΥ
 → $\vartheta \vartheta \vartheta \vartheta \vartheta$
 ΟΥΙΧΘΒΙΘΥ ΘΘΘΘΒΘ ΘΘΘΙΥΧ ΙΒΕΧΘΥΙ
 → $i \vartheta i \vartheta \vartheta \mu \epsilon$,
 ΟΥΙΧΘΒΙΘΥ ΘΘΘΘΒΘ ΥΝΙΙ ΙΒΕΧΘΥΙ
 → $\vartheta \vartheta i \vartheta i \delta \theta$
 ΙΘΒΤΙ ΧΟΥΒΙ ΧΘΥΘΘΙΧΘ ΙΥΘΥΧΘΥ
 → **\$22,691**
 ΟΥΙΧΘΒΙΘΥ ΘΒΧΒΥΘ ΘΥΤΧΝΥ
 ΕΧΙΘΘΕΙ ΙΘΒΤΙ ΧΟΥΒΙ ΧΘΥΘΘΙΧΘ
 → **1.9 years**
 ΟΥΙΧΘΒΙΘΥ ΘΒΧΒΥΘ ΘΥΤΧΝΥ
 ΕΧΙΘ ΙΘΒΤΙ ΧΟΥΒΙ ΧΘΥΘΘΙΧΘ
 → $\theta \circ C S \gg \theta -$

[illegible]
$$\partial \hat{U} - \gamma, {}^3 \zeta \gamma \rangle^{1/4} \zeta^{22} \langle \zeta' \rangle^{1/2} \pm \gamma - \zeta^{a, 21} - \zeta \rangle^{3/4} \zeta - \rangle^{1/4} \pm 2 \zeta^2 \rangle^{1/2} \gamma - \rangle^{1/2} \gamma \zeta \rangle^{1/2} \pm 0 \text{ é } \text{é } \rangle^{1/2} 2 \gamma - \rangle^0 \rangle \mu \text{É}, \text{é}$$

smart ideas

Ì Ø Û Đ Ñ É Û Î Ñ Û

Û Ò Û Î Û Ç Û Û Û × Ý × Û Ò Ý Ç × Ò Ø Û ß Ê Ç × Ò Û Ë Í Î Î Ç



Y±³ Ū¼ Ĩ³ Ĩ[Ⓢ] x¼»Ĥ⁻ cash incentives reduce the cost of an energy-efficiency

Ⓢ±½¼ ĤS Ĥ¼«Ĥ Ĩ[Ⓢ] »½»²±² Ĥ»»Ĥ¹± Ĥ¼¼ Ĥ² Ĥ[±]»» Ĥ⁻ ³½, Ĥ⁻ Ĩ[Ⓢ] »½»²±⁰

¼, » Ⓢ±½¼ Ĥ¼⁻ Ĩ¹¼, »²½»²¼, » Ĥ²¼ »»^a¼»⁻ ´.¼¼¼¼¼¼±Ⓢ Ĥ[Ⓢ] »⁻½.Ĥ´´S «¼»¼¼±Ⓢ

¼.ĤS.¼¼«⁻Ĥ.Ĥ´¼¼»⁻²»⁻¼

■ ÓRÝØ·ØÙ ÙÍ·ÈÙ
■ ÐÍŊÝÙ Í Í ØÙÌ·ØÙ
■ ÐÍŊÝÙ Í Í ØÙØÝÍ ÍŊØÙØÓ·ÝØØ
■ ÚÝÝ·Ø·İÇ ØËRÝ
■ ÐÍŊÝÙ Í Í ŊŊØ·ØÙŋÍÙÙÍ·ØÙÍ·ØÙ·ŊØ
■ ÚÝÝ·Ø·İÇ Ø·ØØ·ØÙ
■ ŊÍØÙÍ
■ ØÙÌ·ØÙ ØÝØØ÷

powering lives

ΥΝΟΘΙΟΥΘΟΙΧΕΩ ΧΟΥΕΙΙΧΒΟ ΙΓΙΙΟΥΙΙΕΩΧΟΙ

e System assessments and financial
 .2½» 2.α»- ρ± @¼«½» »½-@.½-Σ «-»¼ ¾Σ
 ½± ³ °@»--»¼ ζ·@. 2¼«-@·ζ´ @»@.1»@ζ·±²@
 ζ 2¼ °@±½»-- ½±±´.21 -Σ-» ³ -

ΥΝΟΘΙΟΥΙΟΥ Β·Ι ΧΟΥΘΟΙΧΕΩΙ

e High-efficiency air nozzles
 e Low-pressure drop filters
 e Ö±ó±-- ½± 2¼»² -ζ-» ¼@ζ·² -
 e Í»@.1»@ζ-»¼ ½Σ½´.21 ¼@Σ»@
 e ÊÍÜ ±² ζ·@ ½± ³ °@»--±@
 e Ö»@ ζ·@ ½± ³ °@»--±@ ©·γ, .2-»¹ @ζ-»¼
 ÊÍÜ

ΙΟΒΤΙ ΧΟΥΒΙ ΝΘΘΝΙΕΘΧΙÇ ΒΙΙΟΥΙΟΥΘΙ

e Β² ±²ó--» °ζ½´.γΣ ζ--»- ³ »²γ ½± 2¼«½-»¼
 ¾Σ ζ Υ± ³ Ü¼ »²1.2»»@ ±.½»²γ.°Σ »²»@¹ Σó
 efficiency opportunities eligible for
 Υ± ³ Ü¼ Í ³ ζ@γ ¼¼»ζ- .2½»²γ.α»-

ΘΟΥΕ ΥΝΘΙΙΙΕΥΙΧΝΘ ΙΟΥΕΧΥ

e Υζ-, .2½»²γ.α»- ζ 2¼γ »½, 2.½ζ´
 ζ--»-γζ 2½»@ -«½, ζ- »²»@¹Σ ³ ±¼»´.21@ ±
 -«°°@ζγ ζ@½, γ»½γ- ζ 2¼ »²1.2»»@- .2
 ¼»-.12.21, .1, ó°»@±@ ³ ζ 2½» ¾¼«·¼.21-

ÜΒΙΒ ΥΘΟΙΟΥΙ ΧΟΥΘΟΙΧΕΩΙ

e Ì»½, 2.½ζ´ ζ--»-γζ 2½» ζ 2¼ ½ζ-,
 .2½»²γ.α»- °±@.2-γζ´.21 »²»@¹Σ
 efficient equipment and systems
 .2 ²»© ±@ »´.γ.21 ¼¼γ-ζ ½»²γ»@-

ΥΕΙΙΝΘ ΧΟΥΘΟΙΧΕΩΙ

e Υζ-, .2½»²γ.α»- °±@ ½± ³ °»´ »²»@¹Σó
 efficiency projects, such as industrial
 °@±½»-- ±@ -Σ-» ³ .3 °@±α» ³ »²γ-



ΘΙΝΘΟΥΙ ΙΘΒΘΙΘΝΙ → ΙΙΟΥΘΟΥ ΙΙΟΥΘ

ÓÜΒΙΕΤÜÍ ΧΘΘÜÜÜÜÜÜÜ
 → Í»°ζ½»¼ ÖÜ-»- ©·γ,
 ÜÝ ±©»@ -«°°»-»-

ΙΝΙΒΘ ΘΙΝΘΟΥΙ ΥΝΙΙ
 → üçìçðêç

ÜÍÍ×ÓΒΙÜÜ ΒΘΘΕΒΘ ÜÜÜÜÇ ÍΒΕ×ÜÜÍ
 → 3,712,117 kWh

ÜÍÍ×ÓΒΙÜÜ ΒΘΘΕΒΘ ΥΝΙΙ ÍΒΕ×ÜÜÍ
 → üíèèìðçð

ΙΟΒΤΙ ΧΟΥΒΙ ΧΟΥΘΟΙΧΕΩ ΙΟΥΥΧΕΩ
 → üíèèèèèè

ÜÍÍ×ÓΒΙÜÜ ΘΒÇΒΥΘ ΘÜÍ×ΝÜ
 É×ìðÑÈì ΙΟΒΤΙ ΧΟΥΒΙ ΧΟΥΘΟΙΧΕΩ
 → íüì §»ζ@-

ÜÍÍ×ÓΒΙÜÜ ΘΒÇΒΥΘ ΘÜÍ×ΝÜ
 É×ìð ΙΟΒΤΙ ΧΟΥΒΙ ΧΟΥΘΟΙΧΕΩ
 → íüè §»ζ@-



ΘΙΝΘΟΥΙ ΙΘΒΘΙΘΝΙ → ΧΟΥΤÜÜ×ΝΘ

ÓÜΒΙΕΤÜÍ ΧΘΘÜÜÜÜÜÜÜ
 → Ν°γ.³.¼½.´´»@°´ζ²γ-»«²½»@
 @»°´ζ½»¼ γ©±½, ´´»¼©ζγ»@ °«³°-@
 °.°21½,ζ²1»-

ΙΝΙΒΘ ΘΙΝΘΟΥΙ ΥΝΙΙ
 → \$159,568

ÜÍÍ×ÓΒΙÜÜ ΒΘΘΕΒΘ ÜÜÜÜÇ ÍΒΕ×ÜÜÍ
 → 1,169,301 kWh

ÜÍÍ×ÓΒΙÜÜ ΒΘΘΕΒΘ ΥΝΙΙ ÍΒΕ×ÜÜÍ
 → üèèèèèèè

ΙΟΒΤΙ ΧΟΥΒΙ ΧΟΥΘΟΙΧΕΩ ΙΟΥΥΧΕΩ
 → \$81,851

ÜÍÍ×ÓΒΙÜÜ ΘΒÇΒΥΘ ΘÜÍ×ΝÜ
 É×ìðÑÈì ΙΟΒΤΙ ΧΟΥΒΙ ΧΟΥΘΟΙΧΕΩ
 → 1.8 years

ÜÍÍ×ÓΒΙÜÜ ΘΒÇΒΥΘ ΘÜÍ×ΝÜ
 É×ìð ΙΟΒΤΙ ΧΟΥΒΙ ΧΟΥΘΟΙΧΕΩ
 → ðüç §»ζ@-

ÜΝΙ ÖΝΙÜ ΧÜÑÍÖΒΙΧΝΘ

Ü±@ ³ ±@.2°±@ ³ ζγ.±² ζ¾±«γ
 Υ± ³ Ü¼ Í ³ ζ@γ ¼¼»ζ- .2½»²γ.α»-@
 α.-γ- Υ± ³ Ü¼@½± ³ @ß.¼x2½»²γ.α»-@
 ½ζ´ èèèèì í íóíéðð ¼«@.21 2±@ ³ ζ´ ¾¼«-.2»--
 , ±«@- ρ±-°»ζμ ©·γ, ζ Υ± ³ Ü¼ Í ³ ζ@γ ¼¼»ζ-
 -»@α.½» @»°@»-»²γγ.α» ±@ »³ ζ´ «- ζγ
 Í ³ ζ@γ¼¼»ζ-ß.¼Υ± ³ Ü¼@½± ³ @

ÖÜ-γ.³ ζγ½ζ²«ζ´½±-γ-ζª.21- ζ@ ¾¼-»½±² ζ² »½«@½-Σ@ζ-» ±óèè½²γ- °»@μÉ, @

w Υ± ³ ³±@»ζ´γ, Ü¼-±² Υ± ³ °ζ²@ ððí
 Í ³ ζ@γ ¼¼»ζ- Ü²»@¹Σ Üª½-»²½Σ Δ@±¹@ζ³ -- °«²¼»¼ ¾Σ Υ± ³ Ü¼¼«-ρ± ³ »@- .2 ½± ³ °´ζ²½» ©·γ, x´.2±-´ζ@

ComEd
 An Exelon Company

powering lives

smart ideas®

Ì Ø Ñ Î Ò Ì Ñ Ò Í

Ô Û Ü Ô × Û Ø Ì × Ò Û Ð Î Ñ Ö Û Ý Ì



Ð Î Ñ Ö Û Ý Ì Í Ò Ð Í Ñ Ò Ì

Ý «-±³»®

Ó »Ç-«®»- . 3 °´ »³ »² »¼

Ì ±Ç´ °®±½½½ ±±-Ç

Û-Ç. ³ Ç-¼ ²² «Ç´ »²®¹§ -Ç.²¹-

Û-Ç. ³ Ç-¼ ²² «Ç´ ½±-Ç -Ç.²¹-

Í ³ Ç®Ç¼Ç- . ²½»²Ç.ª»- ®»½»ª»¼

Û-Ç. ³ Ç-¼ °Ç§¼Ç½µ °»®±¼ Ç.Ç, ±«Ç
Í ³ Ç®Ç¼Ç- . ²½»²Ç.ª»Û-Ç. ³ Ç-¼ °Ç§¼Ç½µ °»®±¼ Ç.Ç,
Í ³ Ç®Ç¼Ç- . ²½»²Ç.ª»Ì , ±®²-±²-ò ×²½ð
ÊÇ.±«-´ ±½ÇÇ-±²-ò ×´.²±.-

Ô Û Ü ´.¹ , Ç.²¹

üèîïì

îîîèè µÉ ,

üîîîîé

üîèèèèè

íèè§Ç-

í §Ç-

Ð Î Ñ Ö Û Ý Ì Í Ê Ö Ó Ò Í Ç

É , »² §±« °«´´¼.²ÇÇ, »°®-Ç Ì , ±®²-±²-¹Ç- -ÇÇ-±²
¾Ç½µ .² íçéíò Ç °«´´ó-»ª»¼Ç Ç-»²¼Ç²Ç¹®»»¼¼ §±« Ç.Ç, Ç
½ , »»®«´´ó . Û´´ ¤® «°áÉ Ì ±¼Ç§ò Ì , ±®²-±²- ×²½ð .- ±² »±°Ç, »
´Ç¼.²¹ . ²¼ª»° »²¼ª»²Ç¹Ç-±.² Ç ²¼¼ ±²²ª»². »²½» ½ , Ç.²
®»Ç.´»®- .² Ç, » Êò Íòò Ç.Ç, ³ ±®Ç Ç, Ç² Üîò Ì ¾´´.±².²
Ç²² «Ç´ Çª»²«»ò

Ì , ±®²-±²- ±°»®Ç- - îèè ¹Ç-±.² Ç ²¼¼ ½±²ª»². »²½» -±®»-ò
½Ç® ÇÇ- , Ç- ²¼¼ -®Çª»´ °´ÇÇ- .² °.ª» -ÇÇ- .² Ç, »
Ó.¼Ç»-ò Ý «-±³»®- °«»´ «°î , »² ¹®Ç¼Ç Ç- ²¼¼Ç.½ , ±®
-±½µ «° ±² ¹®±½½»®-ò Ì , »¹Ç- -ÇÇ-±² Ç-»²¼Ç²Ç¹®±³ Ç, »
-ª»²Ç- - °®±¾Ç¾§²ª»®¼®Ç¾Ç¾ ±¼ ±° ÛÇ½»±±µ °Ç¹- ±®
¹Ç-±.² »®.½»Ç Ç-»Ç- ¤.Ç ³ ±¾.´ »° ±² Ç°-ò Ð«Ç Ç.´ Ç, »
³ ¾.ª»³ , Ç- ½ , Ç²¹¼ªð Ì , ±®²-±²-Ì ³ - -Ç¹- .- Ç, » -Ç³ »è
°Ç-ò®»²¼¼§ -ª»ª.½»Ç ÇÇ ½±³ ³ «².Ç§ò±®»²»»¼¼ ½±³ °Ç²§ò

ßÇ Ì , ±®²-±²-ò Ç, »®Ç Ç®»®»» , ±Ç ½ , ±½±Ç-Ç Í Ç«®¼Ç§-ò
ÓÇ-±²Ç´ Ø±Ç Û±¹ ÛÇ§ ½»»¼®ÇÇ-±²- Ç²¼Ç Ç-Ç³ Ç, ÇÇ
¼ª»ª»- -Ç²¼ÇÇ.½ , »- Ç²¼¼¼®.²µ- ±Ç Í¼¼ ÝÇ±- »³ »®¹»²½§
Ç±®µ»®- ½ÇÇ².²¹ «° Ç°»»®¼ªÇ¼Ç§ -Ç±®³ -ò

Ì , »®»Ì- Ç-±Ç, » Ì , ±®²-±²-Ì Û®»»² Ð®±³ .-»Ç Ç, » ½±³ °Ç²§-
»²ª.ª±²³ »²Ç´ °®±¹®Ç³ ò Ì , ±®²-±²- «-»- »½±°®»²¼Ç§
½ÇÇ².²¹ °®±¼ªÇÇ- .²-¼ªÇ Ç²¼¼ ±«Ç-¼ªÇ.Ç- -Ç±®»- Ç²¼¼
-»°ÇÇÇ- -®Ç- , Ç.Ç, ®»½§½.²¹ ½ª»³ °-Ç®-ò Ì , »½±³ °Ç²§
Ç, .²µ- ¹®»²É¾§ ½ , ±±-²¹ Ûòò ÛÇÇ Í Ì Ì Ç´ °´.Ç²½»-
Ç²¼¼ «-²¹² ÇÇ«ÇÇ´´.¹ , ÇÇ, »² °±-¾.´ »².Ç- -Ç±®»- ±Ç-Çª»
±² »»½-®.½-Ç§ò

Ô Û Ü ´.¹ , Ç.²¹ °´Ç§- Ç ³ Ç½® Ç±´.²Ç, » Û®»»² Ð®±³ .-»
°´Ç²ò Ô Û Ü- Ç®» «-»¼.²Ç´´²»Ç Ì , ±®²-±²- -Ç±®»- Ç²¼¼
±´½®-Ç±®»- Ç®»¾.²¹ ®»-®±°Ç-Ç¼ªð Ø.¹ , §²°°½.²Ç´.¹ , Ç-
»³ Ç.²¹ ¼¼±¼ª» Ø Û Ü ´.¹ , Ç.²¹ Ç- «².ª» ½ , ÇÇ½ª»®-Ç.½-
Ç, ÇÇ ³ Çµ» ÇÇ ¹±±¼¼ ½ , ±½»°®± Ì , ±®²-±²-Ì °®±°»®»-»-è

» Ô Û Ü- Ç®»¾ÇµÇ¹»®»-ÇÇÇ

» Ô Û Ü- ±°»®Ç-» Ç»´´.² ½±¼Ç ÇÇÇÇ, »®

» Ì «®².²¹ Ô Û Ü- ±² Ç²¼¼ ±°°®»ª»²ÇÇ§ Ç.´´²ÇÇ, ±®»²
Ç, »®-ª»ª.½»´.°»

» Ô Û Ü- ½Ç² , »´°®»¾ª«¼» »²»¹§ Ç²¼¼³ Ç.²»² Ç²½» ½±-Ç-

• ×Ç ³ Çµ»-Ç, »¾ª-Ç-»²-»².²Ç, » Ç±®¼ªÉ-Ç.¼ Ð®.Ç²
ß®¹Ç¾®.¹ , Ç-ÝÐßò ³ Ç²Ç¹»®°².²½.Ç´®»°±Ç.²¹ò ÇÇ
Ì , ±®²-±²- ×²½ð • É.Ç, Ô Û Ü-ò Ç, »®Ç Ç®» »²»¹§ -Ç.²¹-
Ç²¼¼ ±Ç, »®¾²»°Ç-ò´µ» ÇÇ±Ç±°³ Ç.²»² Ç²½» -Ç.²¹-É

Ì , ±®²-±²- -ÇÇ®»¼ªÇ-Ç.²¹ Ô Û Ü- ÇÇ.Ç- Ý.²½.²²ÇÇ- -Ç±®»-
Ç²¼¼Ç, »²³ ±ª»¼±² ±Ç´´.²±.ò Ì , »Ý.½Ç¹±Ç®»Ç-Ç, »
Ç.®¼ ³ Ç®µ»Ç±¹ÇÇ, »²»Ç´.¹ , Ç.²¹ò • É»®» , Ç°ÇÇ§
½±²»²Ç, » ±½ª»®-Ç±®»-ò Ç.Ç, èð ±¹±É-Ç.¼ß®¹Ç¾®.¹ , Ç-
• Ñ«®¹±Ç´- -Ç°².²- , Ç´´Ç, » Ô Û Ü ®»-®±°Ç.°®±½ª-¾§
Í °Ç»³¾ª® íðÉ

ComEd
An Exelon Company

powering lives

Case study

University of Hawai'i Community Colleges

Hawai'i



\$80 million in energy costs to be saved while enhancing education programs

The challenge: Investing in quality education in the face of America's highest energy costs

The University of Hawai'i Community Colleges have grown from a few technical schools in 1964 to today's seven-campus system which provides quality education to more than 34,000 students, 94 percent of whom are from Hawai'i. Their challenge is that Hawai'i's energy costs are among the highest in America. Every dollar spent on utility costs is a dollar that can't go to educational programs. Johnson Controls is working with the colleges to significantly reduce their energy costs and develop sustainability education programs for students, faculty and local communities.

The solution: A 20-year performance contract to improve energy efficiency at campuses and save \$80 million in the process

Johnson Controls began working with the University of Hawai'i Community Colleges in 2010 to improve energy efficiency of their facilities. The improvements are projected to deliver \$80 million in energy savings over a 20 year period. The results, which Johnson Controls guarantees, will offset the cost of the improvements and enable the colleges to continue investing in their educational programs.



At a Glance:

University of Hawai'i Community Colleges

\$80 million

- Projected energy cost savings resulting from facility and equipment improvements over the 20-year performance contract with Johnson Controls.

Five (5)

- Campuses in Hawai'i's seven-campus community college system whose classrooms, labs and other facilities are being made more comfortable, efficient, and sustainable including Honolulu Community College, Kapi'olani Community College, Leeward Community College, Windward Community College, and UH Maui College.

28,500

- Students who enjoy the improved learning environments at these five campuses and have the opportunity to learn about energy efficiency and sustainability to prepare for green jobs of the future.

5,200

- Metric tons of carbon emissions reduced through project, complementing Hawai'i's respect for the land.

The improvements include:

- High efficiency lighting
- Upgrading heating, ventilation and air conditioning systems
- Upgrading central plants at Maui College and Leeward Community College
- Expanded chilled water system
- Metasys' building management system to monitor and optimize equipment and system performance throughout the campuses
- Renewable energy sources such as solar photovoltaic arrays and solar hot water systems

By increasing energy efficiency and reducing fossil fuel consumption, these improvements make the campuses more sustainable and eco-friendly. That is particularly important to Hawaiians, whose culture fosters such a deep respect for the land that they bless it before any building construction can commence.

Educational support

Johnson Controls supports the University of Hawai'i Community Colleges' sustainability education efforts by developing learning modules that are integrated into their curriculum. Local experts speak on energy efficiency and conservation as part of a fellows program. Plus, the facility improvements provide students with a campus living lab that demonstrates how technologies reduce energy consumption. These educational resources raise knowledge and awareness among students, faculty and facility managers with regard to sustainability and also help prepare students who are interested in pursuing green jobs.

Results and Benefits

The five campuses across the University of Hawai'i Community Colleges are expected to save \$80 million over 20 years. The results generated by these projects are guaranteed by Johnson Controls under the terms of the contract. Student and faculty are enjoying more comfortable learning environments, while the university system is able to direct more of their financial resources towards quality education.

Case study Middleton–Cross Plains Area School District

Middleton, Wisconsin



School district and community optimize energy savings

Progressive school districts throughout the country are taking steps to review operational practices and develop energy efficiency programs. In south-central Wisconsin, the Middleton–Cross Plains Area School District (MCPASD) is building on its efficiencies and working with Johnson Controls to develop innovative approaches that are resulting in an estimated \$2.6 million in savings. A similar energy efficiency project with the city is providing additional benefits. Together, these projects demonstrate the community-wide commitment Middleton has made to taxpayer accountability and sustainability.

“Best Place to Live” finds growth challenging

Located close to the Wisconsin state capitol in Madison, Middleton is highly ranked in *CNN/Money Magazine’s* “Best Place to Live” for cities with populations of 50,000 and under.

The city’s 17,400 residents enjoy low unemployment, many cultural and recreational attractions, a charming downtown, and many other amenities. As more people choose to live in this friendly Midwestern municipality, city and school district leaders are striving to keep pace with the growth while keeping an eye on environmental impact.

Audit uncovers district savings

MCPASD has spent years working to keep its facilities operating efficiently, led by Tom Wohlleber, assistant superintendent of business services for MCPASD, Bill Eberhardt, director of buildings and grounds, and Neal Bickler, energy manager.





An ultra-high efficiency heating and cooling system is installed at the school district administration center.

"The innovation is significant for this forward-thinking community, but saving money is even more important. It's vital that we show fiscal responsibility to local taxpayers so they know every penny is well-spent."

**TOM WOHLLEBER, ASSISTANT
SUPERINTENDENT OF BUSINESS
SERVICES FOR MCPASD**



With 6,000 students in 10 school buildings, including eight facilities that are at or over capacity, it's been a challenge. A number of aging facilities also needed extensive capital maintenance for which funds are limited. The district had just completed a four-year upgrade that provided \$2.5 million in cost avoidance through new lights and boilers when Johnson Controls offered to perform an energy audit.

"When Johnson Controls came in and said they could find even more savings for us, I didn't think they could come up with much," says Wohlleber. "I'm impressed and pleased with the breadth of ideas they developed."

Johnson Controls completed a preliminary audit of 12 buildings, including administrative and operational facilities, two high schools, two middle schools, and six elementary schools. Together with the district, they developed a comprehensive, \$2.6 million plan including:

- Replacing interior lighting with T8 and T5.
- Replacing exterior HPS lighting with CFLs.
- Installing LED parking lot lights.
- Removing lights from some hallways.
- Replacing inefficient boilers, including one 1937 unit, at three schools.
- Providing a new heat pump system at the district office.
- Developing a solar thermal system for a high school pool.
- Installing solar thermal for domestic hot water at two schools.
- Supplying low flow water faucets and toilets.

Performance contract pays

The project is utilizing a program that offsets the costs of improvements for the upgrades through the resulting savings. It's called performance contracting, and it allows money that would otherwise go to pay utility bills to be re-directed back into funding the project. Johnson Controls worked with district leaders to secure \$2 million in Build America Bonds, \$500,000 in Qualified School Construction Bonds and \$200,000 in rebates from Wisconsin Focus on Energy.

"By bundling the entire project, we were able to include loose ends that hadn't been addressed in earlier upgrades," says Wohlleber.

The expected savings during the 14-year contract include about \$180,000 each year in reduced electricity, natural gas and water and sewer bills; improved operational efficiencies; and avoided capital expenditures. District leaders are pleased with the process.

"Johnson Controls was an incredible partner with our school district. They provided a wide range of alternatives to improve our facilities and systems. Included in this analysis was an evaluation of costs, return on investment, opportunities for federal or state support through matching funds/grants, and an on-going willingness to re-evaluate," says Don Johnson, Middleton school superintendent.

"They met promised timelines, responded to necessary changes, and followed up to fine tune the systems that were installed to increase efficiencies. They also provided clear and concise data regarding cost savings and system performance after the projects were completed," he says.

Triple-Bottom-Line benefits

In addition to the dollar savings, the project brought environmental and social advantages to the community. The district's annual carbon footprint is expected to be reduced by over 1.5 million pounds of CO₂ during the next 14 years.

The project also brought about 60 jobs to the community during the construction period. Since Johnson Controls provides education and training on energy efficiency and renewable energy to its contractors, if they're not already experienced, those local businesses are now ready to install green technologies for other clients.

MCPASD's environmental performance is recognized through the federal government's ENERGY STAR[®] program. All school buildings have been benchmarked, and several have received the prestigious ENERGY STAR label, indicating they are in the top 25 percent of all similar buildings in the country.

City sustainability

When city leaders learned about the school district's success, they also met with Johnson Controls to determine how to expand the project to municipal efforts.

"Our common goal is to develop and implement an efficiency and sustainability program that is practical, transparent and meaningful, that maximizes cost-effectiveness and available grants, and provides an educational experience that extends to the entire community," according to the project mission statement.

Through another performance contract that utilized available state and federal funds, the City of Middleton developed an energy savings project that included several hundred efficient LED street and parking lot lights, more efficient lighting at the public library and variable frequency drives (VFDs) on municipal water pumps – again, paid back through the savings.

"Middleton prides itself on being a sustainable community, and energy conservation is one of the most important components of sustainability," says Mike Davis, City Administrator.

School superintendent Johnson agrees, saying, "We are establishing a long-range strategy to maximize dollars for student learning in comfortable, safe, quality facilities. Energy conservation, we believe, is a strategy that everyone in the community recognizes as a prudent measure to take. We will continue to monitor new technologies, strategies, and changing market conditions that might allow for more innovation to conserve."

All-America city finalist

The project helps the city meet the goals set out in its Sustainable City Plan, which was clearly noted in its recognition as a 2010 finalist in the National Civic League's All America City Awards for outstanding civic accomplishments.

"Johnson Controls has been an effective partner in energy-saving solutions with the City of Middleton. Jeff Mangan joined our All-America finalist trip to Kansas City to present for national honors, and he and other Johnson Controls employees



"The extraordinary energy savings projected for the utility's VFD are probably the most noteworthy improvement, but my favorite is the new LED lights in our decorative fixtures for our historic Downtown."

**MIKE DAVIS, MIDDLETON
CITY ADMINISTRATOR**



"Although many organizations and businesses may think that they can act on any conservation projects on their own, I recognize that without the expertise that Johnson Controls brings to the table, we would be spending hundreds of thousands of dollars unnecessarily. This project was clearly a "no-brainer" for the district. Clearly it was a win-win!"

**DON JOHNSON, MIDDLETON
SCHOOL SUPERINTENDENT**

worked with us to advise and guide our successful implementation of a program that will save energy and taxpayer dollars," Davis says.

On to more savings

After the contract expires, the city and school district will continue to accrue the benefits through the new and efficient equipment. MCPASD is considering geothermal heat pumps at several schools, converting remaining

pneumatics to DDC controls, converting low-efficiency exterior lighting, and replacing some windows and roofs.

"The innovation is significant for this forward-thinking community, but saving money is even more important. It's vital that we show fiscal responsibility to local taxpayers so they know every penny is well-spent," says Wohlleber.



Woodland Primary School – Building a Sustainable Future

What is LEED?

LEED™ – Leadership in Energy & Environmental Design – is the most recognized green building rating system in the marketplace today. Developed by the United States Green Building Council (USGBC), LEED provides building owners and managers with a framework for identifying and implementing practical and measurable green building strategies, from design and construction through the ongoing operations and maintenance of given facilities. LEED for Existing Buildings: Operations & Maintenance certification ensures that the facility adheres to a set of rigorous green building policies and practices, ranging from energy and water conservation to optimal indoor environmental quality and waste reduction.

Woodland Primary School is one of only a handful of LEED EB: O&M certified public elementary schools in the country and the **1st** in the state of Illinois to receive Silver Certification.



SIEMENS

Green Building Facts

Why is LEED important?

LEED is a globally recognized symbol of green building excellence. It provides independent, third party verification through technical experts that ensure building certification meets the highest levels of quality and integrity and improves human and environmental health.

How is LEED for Existing Buildings: Operations & Maintenance Certification achieved?

The LEED rating system consists of seven credit categories that address the entire spectrum of green building performance and operations. These include Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Innovation in Operations, and Regional Priority.

For the certification process, Siemens and Woodland worked hand in hand to document the impact of efficiency improvements and identify additional sustainability measures that would help achieve LEED certification. The final application and supporting information were submitted to the USGBC for final review and approval.

How did Woodland Primary School obtain this level of success?

Prior to applying for LEED certification, a variety of facility and energy efficiency improvements were completed at Woodland Primary to increase overall building performance. These projects were implemented in multiple phases as part of a 13-year partnership with Siemens. "By taking a proactive approach to aging assets and equipment, we've been able to increase efficiency and reduce electric, gas and water usage in a facility that is nearly 60 years old," says Associate Superintendent of Finance and Operations, Bob Leonard.

In addition, Woodland's facilities staff has adopted a range of green and sustainable policies in recent years, including waste management, procurement and cleaning. "It's a matter of documentation and having an overall awareness of how your buildings are operating" says Director of Operations & Facilities, Don Selzer. "The stamp of approval by the USGBC isn't about a plaque on the wall – it's a validation of achieving the highest level of building performance."

What are the benefits for Woodland Primary School?

Through the process of becoming LEED certified, Woodland Primary School has improved the indoor environment quality for students and faculty, aided the conservation of water and other natural resources, and increased the energy efficiency of its operations. District 50's Operations & Facilities team along with the leadership team at Woodland Primary School have already seen a quick return on investment. "Our electric usage has decreased by 10% or 88,000 kWh and natural gas by 15% or 9,300 therms respectively," adds Leonard. "To put that in perspective, it is the equivalent of operating 817 flat screen TVs, 4,343 laptop computers, or eliminating the average electricity used by 32 homes in an entire year."

Greening schools, decreased energy consumption, lower operating costs and a greater carbon footprint is the truest model of sustainability. The environmental benefits are somewhat staggering considering a 25% drop in electricity and natural gas usage will avoid sending 48.6 tons of waste to the landfill. "As stewards of the community, we have a social responsibility to do the right things for our entire community and the environment," states Superintendent, Dr. Joy Swoboda.

As District 50 teaches its youngest students about respect for the environment, the school building itself becomes a learning tool for this important lesson. Swoboda adds, "By adopting green building strategies and procedures, it is our hope that our accomplishments at Primary school will serve as a blueprint for not only our district but for our neighboring schools in and around Lake County."

LEED Profile

Facility:

Woodland Primary School

Classification:

LEED Existing Buildings:
Operations & Maintenance

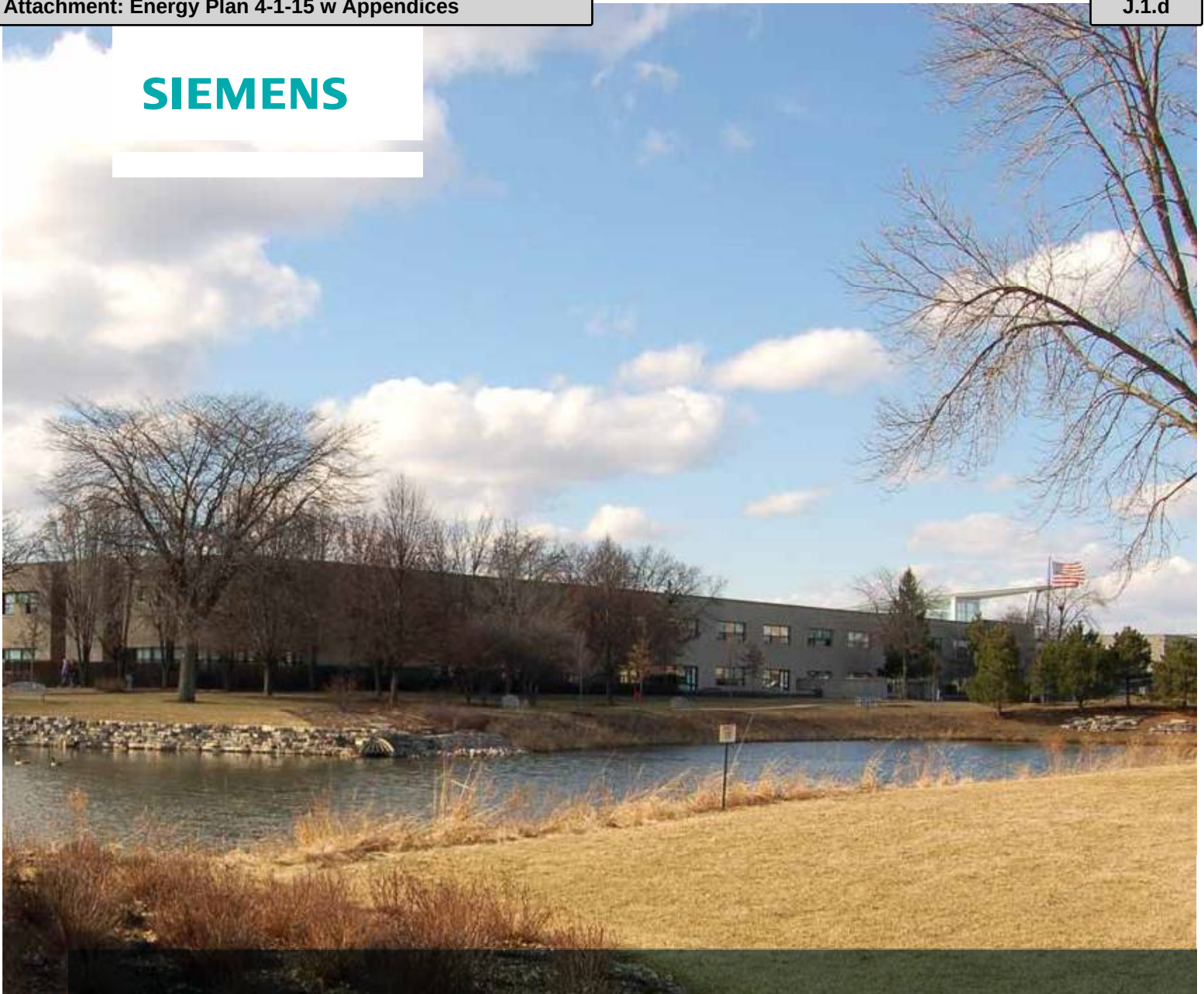
Certification Level:

Silver (51 points achieved)

Certification Date:

September 2013

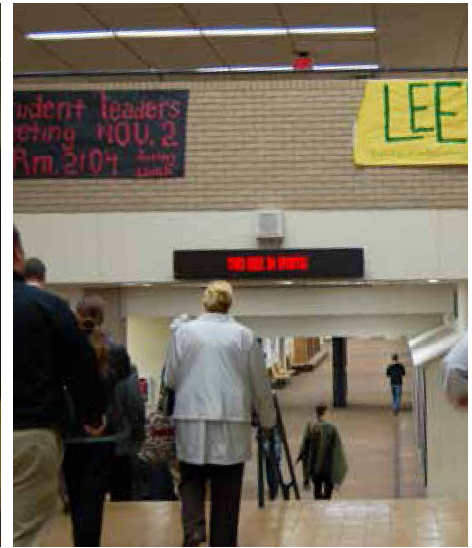
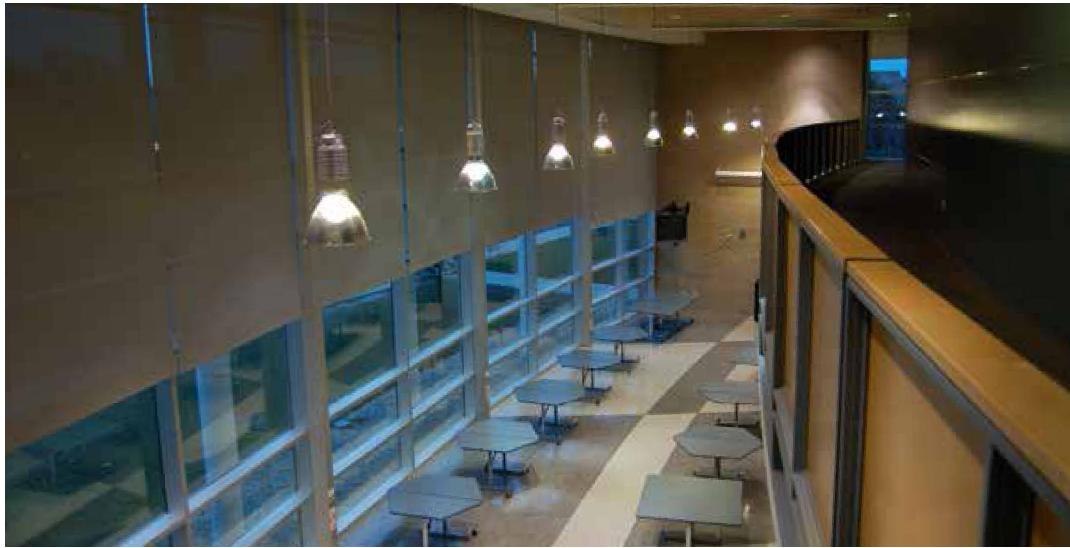
SIEMENS



Adlai E. Stevenson High School

Siemens helps Illinois school become the first high school in the country to achieve LEED-EB Gold Certification.

Answers for infrastructure.



Facility improvements generate \$100,000 in annual energy savings.

“Earning LEED Gold status is a validation of our ‘Green Initiative’ to reduce the school’s carbon footprint, and an achievement we all share, including the faculty, staff, and especially the students.”

Mark Michelini
Adlai E. Stevenson High School
Assistant Superintendent
for Business

Located in the northern suburbs of Chicago, Illinois, Adlai E. Stevenson High School is home to some 4,600 students, faculty, and staff. Since opening its doors in 1965, Stevenson High School has become one of the leading high schools in America, and has received the President's Award for Excellence in Education five times. Stevenson's 76-acre campus encompasses more than 1 million square feet of state-of-the-art facilities.

Client Objectives

In 2007, Adlai E. Stevenson High School in Lincolnshire, Illinois, set a goal to achieve the U.S. Green Building Council's LEED Certification. Looking to focus their efforts on becoming a green, energy-efficient, and sustainable school, Stevenson sought help from Siemens Building Technologies, including assistance with reducing natural gas and carbon usage, and energy efficiency.

Siemens Solution

Through a full assessment and comprehensive understanding of the technical and operational aspects of the campus' building automation, HVAC, lighting, and other systems, Siemens was able to help the Stevenson Green Initiative Committee develop a broad operational plan to systematically reduce electricity and natural gas usage after hours.

Among key deliverables, Siemens provided full transparency of CO₂, energy consumption, and pricing through the company's Energy Monitoring and Control (EMC) platform. Highly skilled energy technicians also delivered an existing building continuous commissioning program through on-going monthly energy analysis. Siemens also installed an interactive touch screen that displays energy consumption data from the Siemens APOGEE® building automation system.



The U. S. Green Building Council presents Adlai E. Stevenson High School with their LEED Gold Certification plaque.

Left to right:

Doug Widener – U.S. Green Building Council IL President, Merv Roberts – Stevenson High School Board, Lori Lyman – Stevenson High School Board, Mark Michelini – Stevenson High School Assistant Superintendent of Business, Bob Dold – Illinois Congressman, Dave Wilms - Stevenson High School Sustainability Coordinator

To promote a green lifestyle in all areas of their lives, Siemens also worked to provide opportunities for Stevenson students to integrate sustainability into their classroom curriculum. This included a web-based energy dashboard and assistance in the development of the net zero environmental science lab by coordinating the effort to connect and monitor the solar photovoltaic and thermal energy sources, as well as the green roof.

Client Results

With the help of the Siemens Building Technologies Division, Stevenson recently achieved their goal by becoming the first high school in America to be certified LEED Gold for Existing Buildings (EB).

"In collaboration with Siemens and support from partners Cannon Design and Sodexo, our facilities team created a master plan to address campus energy and resource consumption," said Adlai E. Stevenson High School Assistant Superintendent for Business, Mark Michelini, who coordinated the effort. "We've met and exceeded those targets and the result is our LEED certification - a national benchmark and an achievement we all share."

As a result, Stevenson was able to achieve its first set of energy consumption reduction targets set forth in its sustainability mission

statement: 7% lower electricity use and 5% less natural gas consumption. According to Stevenson officials, those measures have saved the school over \$100,000 annually. The energy reduction targets were also seen in a 9 point increase in Stevenson's ENERGY STAR® score after Siemens' work with the school.

Since obtaining LEED Gold Certification, Siemens has continued to provide ongoing maintenance and operational efficiencies to uphold Stevenson's current certification and ensure they will qualify for recertification in five years. This includes maintaining the school's score and providing quarterly updates to ENERGY STAR; ongoing energy optimization; and implementation of Stevenson's Building Operating Plan and Preventative Maintenance, which was documented for initial certification.

In addition, Siemens recently began a Performance Contracting project which includes a handful of energy-saving measures. Siemens also implemented improvement measures identified during the Smart Energy Design Assistance Center (SEDAC) energy assessment process and completion of switchgear breaker testing and troubleshooting through the Siemens electrical services offering.

Siemens regularly participates in sharing information on career opportunities in the Science, Technology, Engineering, and Mathematics (STEM) professions and supports the District's Green Committee by participating and sponsoring both faculty and student sustainability events. This is particularly important to the student body, as many of them have become very aware of the importance of becoming green and sustainable in their own lives. Because of this, Stevenson students played a big role in the LEED process, including managing the transportation and occupant surveys, and assisting with water conservation calculations. Students have continued to provide their time and efforts to keeping Stevenson sustainable.

Siemens Industry, Inc.
Infrastructure & Cities Sector
Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, IL 60089
Tel: (847) 215-1000
Fax: (847) 215-1093

© 2012 Siemens Industry, Inc. (4/2012, Part #153-BAU-25)

Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming, and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly

growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

“We are the preferred partner for energy-efficient, safe, and secure buildings and infrastructure.”


$$\tilde{N}_{1/2-\pm 3/4}^{\gg} \hat{\partial} \hat{\imath} \hat{\imath}$$
$$I^{\circ} \gg \frac{1}{2} R \ll 3 \quad \emptyset \gg \zeta^{-1}$$
$$\hat{I} \otimes \hat{\chi}^2 \gg \dots, \hat{\chi}^1, \dots \gg \hat{\chi}^0 \pm \hat{\chi}^3 \hat{\chi}^{2\frac{1}{2}} - \pm' \ll \hat{\chi}^1 \pm \hat{\chi}^0 \pm \hat{\chi}^3 \hat{\chi}^{\frac{1}{2}} \gg \dots, \gg \hat{\chi}^1, \hat{\chi}^{\frac{1}{2}} \hat{\chi}^0 \gg \vdots \hat{U} \otimes \hat{\chi}^{2\frac{1}{4}} \hat{I} \hat{\chi}^0 \hat{\chi}^{\frac{1}{4}-\hat{O}} \hat{O}^{\frac{1}{2}}, \hat{\chi}^1 \hat{\chi}^2$$
[illegible][illegible]

Ý.ç. »²¹»

[illegible][illegible]
$$|\pm'\rangle \llcorner \pm^2 - \zeta^{21/4} \otimes \rangle - \llcorner \neg -$$

$\mathbb{I} \otimes \mathbb{Z}^2 \rangle, \zeta - \rangle \mathbb{Z} \otimes \mathbb{Z}^2 \rangle \mathbb{I} \circ \rangle \frac{1}{2} \otimes \mathbb{K} \circ \mathbb{Z} - \rangle \mathbb{K} - \rangle \gamma, \mathbb{I} \otimes \mathbb{K}^1, \quad {}^3 \mathbb{Z} \otimes \mathbb{S} \otimes \mathbb{Z} - \rangle \pm^0$
 $\circ \otimes \mathbb{A} \cdot \frac{1}{4}, {}^2 1, \quad , {}^1, \hat{0} \circ \rangle \otimes \pm \otimes {}^3 \mathbb{Z} \otimes \frac{1}{2} \rangle \rangle \quad \leftarrow \mathbb{K} \circ {}^3 \rangle \mathbb{Z} \otimes \frac{1}{4} \pm \mathbb{K} - \rangle \gamma \mathbb{Z} \otimes \frac{1}{4}, {}^2 1$
 $- \rangle \mathbb{A} \cdot \frac{1}{2} \rangle \rangle \mathbb{B}^0 \rangle \rangle \mathbb{I} \otimes \mathbb{Z}^2 \rangle \rangle \mathbb{A} \otimes \mathbb{Z}^3 \rangle \rangle \mathbb{Z}^2 \mathbb{Z} \otimes \mathbb{I} \otimes \mathbb{A} \otimes \frac{1}{4} - \mathbb{K} \circ \circ' \rangle \rangle \otimes \pm^0 \hat{0} \pm \mathbb{A} \otimes \gamma \pm \mathbb{Z}^0$
 $\gamma, \rangle \rangle \mathbb{A} \otimes \frac{1}{4}, {}^2 1, \rangle \rangle \mathbb{Z} \gamma, \quad \frac{1}{2} \mathbb{Z} \otimes \rangle \leftarrow \mathbb{K} \circ {}^0 \mathbb{S} \frac{1}{2} \pm \mathbb{Z} \otimes \mathbb{I} \otimes \gamma \cdot {}^2 1 \quad \frac{1}{2} \pm {}^3 \circ \mathbb{Z} \otimes \mathbb{S} \otimes \mathbb{I} \otimes \gamma, \rangle \rangle$
 ${}^3 \rangle \rangle \mathbb{A} \otimes \rangle \leftarrow \pm^0 \hat{E} \otimes \mathbb{B} \mathbb{X}^2 \otimes \hat{0} \hat{E} \otimes \mathbb{Y} \mathbb{Z} \otimes \frac{1}{4} \mathbb{D} \otimes \mathbb{A} \cdot - \rangle \gamma \hat{0} \hat{Y} \otimes \mathbb{I} \otimes \mathbb{Z}^2 \rangle \rangle \mathbb{Z} \otimes \frac{1}{4}$
 $\hat{E} \otimes \mathbb{B} \otimes {}^3 \rangle \rangle \mathbb{A} \otimes \rangle \mathbb{I} \circ \rangle \frac{1}{2} \otimes \mathbb{K} \circ \mathbb{Z} \rangle \rangle \mathbb{D} \rangle \gamma, \quad - \cdot {}^1 \mathbb{Z} \rangle \frac{1}{4} \mathbb{I} \otimes \pm \otimes {}^3 \mathbb{Z} \gamma \otimes \mathbb{K} \cdot {}^2 \rangle \rangle -$
 $\otimes \rangle \gamma \cdot \pm \mathbb{Z} \cdot, \circ \mathbb{Z} \otimes \mathbb{I} \rangle \rangle \rangle \rangle {}^3 \rangle \mathbb{Z} \otimes \gamma - \mathbb{K} \circ \leftarrow \rangle \pm^0 \rangle \rangle \mathbb{Z} \otimes \mathbb{I} \otimes \pm \mathbb{Z}^1 \cdot - \rangle \gamma \pm^0, \rangle \rangle \mathbb{Z} \gamma,$
 $\frac{1}{2} \mathbb{Z} \otimes \rangle \rangle \mathbb{A} \otimes \mathbb{B} \otimes \mathbb{Z} \otimes \frac{1}{2} \rangle \rangle - \mathbb{Z} \otimes \frac{1}{4} - \rangle \gamma \mathbb{Z} - \rangle \mathbb{Z} - \rangle \hat{0} \pm \mathbb{A} \otimes \gamma \pm \mathbb{Z}^0 \mathbb{Z} \otimes \mathbb{I} \otimes \mathbb{A} \otimes \frac{1}{4} - \mathbb{K} \circ \circ' \rangle \rangle \otimes$
 ${}^3 \mathbb{Z} \otimes \rangle \rangle \mathbb{I} \otimes \mathbb{Z}^2 \rangle \rangle \mathbb{Z} \cdot \frac{1}{2} \rangle \rangle \mathbb{Z} \circ \rangle \mathbb{I} \otimes \gamma \mathbb{Z} \rangle \rangle \otimes$

[illegible][illegible]
$$|\mathcal{S}_{-1}\rangle^3 - \zeta^{21/4} |\mathcal{R}^{a,1/2}\rangle -$$
[illegible][illegible]

pī, » μ±2⊙ «¼1¼2 » »⊙»⊙»2½ » 2¼ 0±1±⊙---a» 7, .2μ.21 ±0
 l⊙2 » 2' .12 ⊙ » ⊙7, ±⊙⊙ ±⊙12' .1 2' ±2 2' 0±1±⊙7--- 2¼ ¼a»
 a2' «» 7, ⊙±«1, ±«7 ±«⊙, »2' 7, ½2⊙»-5-» 3⊙p -2' ¼ l±3 l, »±⊙⊙-⊙
 ¼⊙»½-±⊙⊙ 2' ¼7-5 -«°°±⊙7-»⊙a.½»-⊙ l° »½7⊙«3 ⊙»2' 7, ⊙p l, »⊙
 -±' «7±2- -⊙⊙μ » 2' ¼2' 2½¼ 2' 0±⊙±½, 7, 2' »2, 2½»-- 2'⊙»5 2¼
 -«2' 2' 5⊙½7¼«½»- ±⊙⊙⊙2' .21 » »⊙2-»-⊙⊙ «1 3 »27- »2a.⊙±2 3 »2-2'
 ½±2¼7, 2' ±2- 2¼¼ 3 ±7- .3 ±⊙⊙2' 2' 5⊙ 0±⊙a.½»- » »½»⊙7±2'
 »⊙⊙»⊙»2½»- 0±⊙±⊙⊙ 2' 7- »2¼ 7-2'⊙⊙ x-2' .1⊙2' 7 ±2, 2'a » 2'
 -⊙«-»7¼ 2'⊙⊙2'⊙ »⊙---7, 21 ±⊙⊙ »7 2' .2 2' ½, »a.21 ±«1⊙ 3 ---±2⊙
 a---±2 2¼¼ a2' «»-⊙



Ingersoll Rand (NYSE:IR) is a world leader in creating and sustaining safe, comfortable and efficient environments in commercial, institutional and industrial markets. We are a \$14 billion global business committed to sustainable business practices and increase industrial productivity and efficiency. We are

w iðit i 2» ß' 0.1, 7- 0»» 0³» 1/4
 Ýβi06i0Èiææ0Ù0 Ñ1/2+1/2» iæ iðit i

[illegible]
$$-0.2 \gg 0.1 \pm 3$$

[illegible]

É-γ, »©»» 3 ± a, 2 1 ©-γ- 2 1/4 ©' ± ©0-»»» 1/4 1/4 1/4 1/4 1/4 a.»
1/4 ± 3 ©»--±©0 γ, » 1/4 a 2 1/2 1/4 1/4, »' 1/2 ©' ©-1/2 © 1/2, ''» 3 © ± a-
»»» 1 § »00, 1/2 ± 1/2 § 2 1/4 ©' --©-©-''-- 3 ©, 2-» 2 1/2 1/2 1, » 1/2, ''»
©'-± © ± a, 1/4-- 1/4 ± 2-...» 2-γ »©» ± 3 2 1/2 ©' ± » 2 1/4' γ, » ±, ©-γ 2-
3, ...± 2 1/2 ©, γ-1/2 ©' ± ©' » ©' ©-γ ± 2-0

[illegible][illegible][illegible][illegible]

↑»-«'-

[illegible][illegible]
$$, 21 \gg \textcircled{R} - \pm'' \textcircled{R}; 21/40^{1/2} \pm 3$$
$$\hat{E} = i\left(\frac{1}{2} + \frac{3}{2}\gamma\right)\frac{1}{4} + \left\langle -0.21 \right\rangle 2a\left(\frac{1}{2} + \frac{3}{2}\gamma\right)2\gamma\left\langle \frac{1}{2} + \frac{3}{2}\gamma \right\rangle - \left\langle 0.21 \right\rangle \left\langle \frac{1}{2} + \frac{3}{2}\gamma \right\rangle - i$$
$$w\hat{1}\partial\ddot{1}\ddot{1} \ x^{21}\gg_{\pm} \hat{1}_{\frac{21}{4}} \quad \Upsilon\beta\hat{1}\hat{0}\acute{0}\hat{0}\hat{0}\hat{0}\hat{0}\hat{0}\hat{0} \quad \acute{0}_{\frac{81}{2}} \ \partial\hat{0}\hat{1}\partial\ddot{1}\ddot{1}$$

APPENDIX E

Elevate Energy 2007-2012 Emissions Data for DuPage County

DuPage County Energy & Emissions Profile

Prepared for:
DuPage County Green Government Council
Joy Hinz, Environmental Specialist

Submitted by:
CNT Energy and the
Center for Neighborhood Technology

November 29, 2013

CNT Energy
1741 N. Western Avenue
Chicago, Illinois 60647

Contact:
Lindy Wordlaw, AICP, Energy Program Manager
Phone: (773) 269-4012
E-mail: lindy@cntenergy.org
www.cntenergy.org
www.cnt.org



DuPage County Energy and Emissions Profile, 2012 Baseline

About the Project

In 2009-2010, the Center for Neighborhood Technology and CNT Energy created community energy profiles for every municipality in the seven county Chicago metropolitan region as part of the Municipal Energy Profile Project (MEPP). The goal of MEPP was to provide all municipalities with an energy and emissions profile and corresponding tools and resources to help each community best utilize the information presented in the profile.¹ The project was meant to provide communities with a crucial starting point to discuss energy issues within their community. MEPP was funded by the Illinois Clean Energy Community Foundation and relied on support from ComEd, Nicor, Peoples Gas, North Shore Gas, and Illinois Department of Transportation.

In 2013, CNT Energy was hired by DuPage County to take that same dataset to create a 2007 County Baseline Profile and then create a 2012 comparison profile that will be used to help measure the County's progress in meeting emissions reductions goals set forth in its Cool County commitment.

The Value of This Profile

The 2012 Baseline profile includes annual countywide electricity and natural gas consumption, vehicle miles traveled, and a greenhouse gas emissions profile as compared to the 2007 Baseline. Further analysis of these differences will take place in Phase 3 of this project in 2014, however a brief initial summary has been provided in each section. There are some datapoints in this 2012 analysis that are different from the 2007 profile which are described in the Methodology section.

Regardless of these data collection and analyses differences, having this aggregate baseline data at the local level is important because it makes it possible to accurately benchmark energy use. Simply put, you cannot measure energy savings without first knowing your actual energy consumption. Further, pinpointing the county's energy trends will help you target the most effective programs to reduce energy use and costs, and their associated emissions.

¹ CNT Energy developed a corresponding MEPP guidebook held workshops and provided free technical assistance.

What's in This Energy and Emissions Profile?

The original MEPP profiles included five sections that feature introductory components for each dataset to familiarize readers with a few key concepts. The new report features two additional sections. A sixth section – Moving Forward – has been added to this profile. Within sections one through five there is a brief “moving forward” discussion on the focus of further analysis for each respective section, and Section 6 highlights these and other next steps. Finally, Section 7 explains the methodology and differences in data collection between the 2007 and 2012 Profiles.

Section 1: Using Your Profile

Section 2: Electricity Consumption in DuPage County

Section 3: Natural Gas Consumption in DuPage County

Section 4: Transportation - Vehicle Miles Traveled in DuPage County

Section 5: Emissions Profile for DuPage County

Section 6: Moving Forward

Section 7: Methodology

Section 1: Using Your Profile

The aggregate data and information provided in this profile can help in strategy development in the following ways:

- 1) Baseline Metrics: Serves as a starting point from which to measure the progress of strategies and programs.
- 2) Accurate Data and Measurements: Provides a more accurate picture of your community's average energy consumption based on actual utility data instead of national or regional averages. This will help you better calculate the potential for strategy savings, both individually and at scale.
- 3) Data Indicators: May assist in identifying some areas for targeting strategies. For example, a municipality whose average household energy consumption is significantly higher than the county may want to investigate the reasons why and identify potential residential energy saving strategies. (e.g. Is our average higher due to larger houses? Is it because we have an older, less efficient housing stock?)

More detailed examples are provided in the Guidebook for the Municipal Energy Profile Project.

Guidebook for the Municipal Energy Profile Project

In the initial MEPP project, CNT Energy developed a Guidebook to assist municipalities in further investigating how profiles might be used. The Guidebook is provided as an addendum to this 2007 Baseline Profile for DuPage County. The initial draft of the Guidebook remains useful with this 2012 profile as DuPage County Green Government Council begins to identify strategies to reduce emissions. The Guidebook includes the following topics:

- Understanding your profile
- Municipal energy strategies
- Community-wide energy strategies
- Funding resources and technical assistance
- Glossary of energy terms and acronyms

Section 2: Electricity Consumption in DuPage County

Introduction to Electricity

Electricity consumption in both the residential and commercial/industrial (C & I) sectors is currently increasing nationwide. Growth in consumer electronics and information technology equipment, as well as an increase in home size and air conditioning use are prominent reasons for consumption increases in the residential sector. In the commercial/industrial sector, increasing consumption is driven by telecommunication and network equipment along with specialized technologies such as medical imaging advancements.² Electricity is measured in kilowatt (kWh) hours.

Total Consumption

In 2012, the amount of electricity consumed in DuPage County was 11.03 billion kWh, which represents a 7.8% reduction from 2007. (Table 1). Like 2007, 25% of the county's electricity consumption occurred in the residential sector; the remaining 75% was consumed in the C & I sector. Figures 1 and 2 compare electricity consumption by sector in DuPage County for 2007 and 2012.

Table 1. Total Electricity Consumption (kWh), 2007-2012

DuPage	2007	2012
Residential	3,046,756,030	2,779,395,133
C & I	8,931,290,066	8,255,502,646
Total	11,978,046,096	11,034,897,780

Figure 1. DuPage County's Electricity Consumption by Sector, 2007

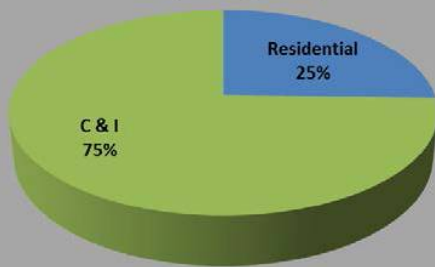
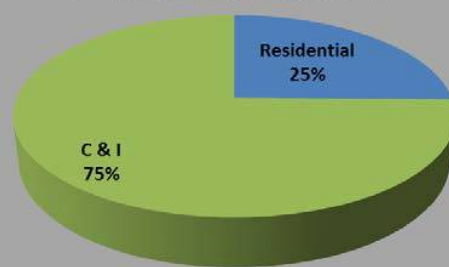


Figure 2. DuPage County's Electricity Consumption by Sector, 2012



Residential Consumption and Costs

In the residential sector, the county's average annual consumption per household was 8,303 kWh in 2012, compared to 9,013 kWh five years earlier. Factors that affect electricity usage include square footage,

Table 2. Residential Electricity Consumption & Costs, 2007-2012

DuPage	2007	2012
Number of Households	338,050	334,764
Average kWh per Household	9,013	8,303
Average Annual \$ per Household*	\$970	\$1,043

*Calculated using average residential sales per kWh (ICC Utility Sales Statistics 2007; 2012)

² Energy Information Administration: "Miscellaneous Electricity Services in the Buildings Sector", AEO2007
<http://www.eia.doe.gov/oiaf/aeo/otheranalysis/mesbs.html>

presence and efficiency of air conditioning, efficiency of lighting, appliances and systems, and occupant behavior. Despite the reduction in average household energy consumption, increasing utility rates resulted in a higher average cost per household. Table 2 compares 2007 and 2012 average annual electricity consumption and cost per household.

Moving Forward – Analyzing 2007 and 2012 Electricity Consumption

CNT Energy will further analyze this decrease in consumption in the analysis phase of the project to be conducted in 2014. The total number of households decreased by just 1%, so there appears to be a legitimate decrease in consumption, barring any major differences in data collection that could impact the totals. In Phase 3 this will be examined, as well a more detailed look at the breakdown with residential and non-residential sectors, which may change slightly after a deeper look at the City of Naperville's total consumption.³

³ As a municipal utility, ComEd accounts for Naperville electricity as commercial usage, while the actual breakdown between residential and nonresidential sectors is information that can only be provided by Naperville.



Section 3: Natural Gas Consumption in DuPage County

Introduction to Natural Gas

In Northern Illinois, natural gas is the primary space heating fuel. In addition to space heating, natural gas is commonly used for hot water heaters, clothes dryers, and cooking in the residential sector. However, natural gas consumption has been decreasing slightly over time in both the residential and commercial/industrial sectors as homes and buildings become more efficient and de-industrialization occurs. Natural gas is measured in therms.

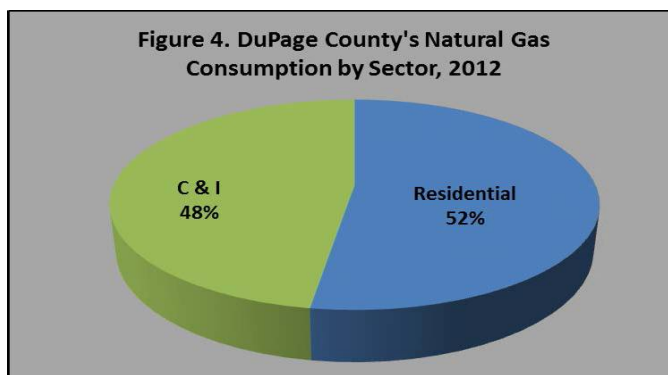
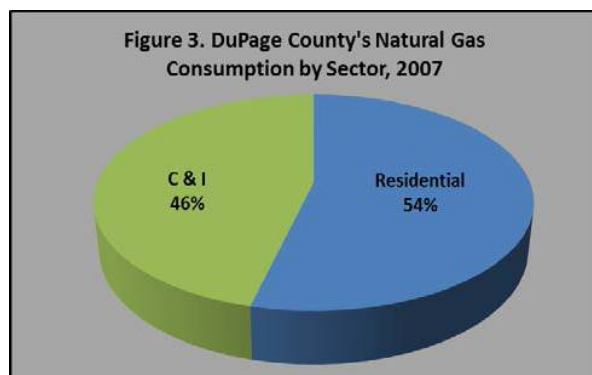
Total Consumption

In 2012, the amount of natural gas consumed in DuPage County was 502 million therms, which represents a 13.6% reduction from 2007.

(Table 3). 52% of the county's natural gas consumption occurred in the residential sector; the remaining 48% was consumed in the C & I sector, only slightly different from 2007. Figures 3 and Figure 4 depict natural gas consumption by sector in DuPage County for 2007 and 2012.

Table 3. Total Natural Gas Consumption (Therms), 2007-2012

DuPage	2007	2012
Residential	313,707,381	263,468,701
C & I	268,672,694	239,149,653
Total	582,380,076	502,618,354



Residential Consumption and Costs

In the residential sector, the county's average annual consumption per household is 787 therms compared to 928 therms five years earlier. Factors that affect natural gas usage include building size, building age, building envelope efficiency, efficiency of the furnace, boiler and water

Table 4. Residential Natural Gas Consumption & Costs, 2007 - 2012

DuPage	2007	2012
Number of Households	338,050	334,764
Average Therms per Household	928	787
Average Annual \$ per Household*	\$824	\$465

*Calculated using average residential sales per therm (ICC Utility Sales Statistics 2007; 2012)

heater, as well as occupant behavior and building operations and maintenance. Table 4 compares 2007 and 2012 average annual natural gas consumption and cost per household. Costs have dramatically decreased due to falling prices for natural gas.

Moving Forward – Analyzing 2007 and 2012 Natural Gas Consumption

CNT Energy will further analyze this decrease in consumption in the analysis phase of the project to be conducted in 2014. While the numbers point to a sizeable decrease, there may be the omission of “transport gas” in the 2012 data that will result in a smaller decrease. In Phase 3 this will be examined, as well what national trends can be attributed to a decrease in overall consumption.



Section 4: Transportation – Vehicle Miles Traveled in DuPage County

Introduction to Transportation/Vehicle Miles Traveled

Typically, transportation accounts for the second largest portion of energy usage after buildings. For this report, vehicle miles traveled (VMT) was tabulated from travel statistics provided by the Illinois Department of Transportation (IDOT) based on Illinois Environmental Protection Agency (IL EPA) odometer and population data. However, a second and even more useful number is provided which is the VMT that can be attributed to households, also called non-commercial transportation. This is often deemed more useful for strategy planning purposes of local government whose transportation policies likely only affect the transportation choices of its residents, and not business decisions made by commercial-related travel.

Total Consumption

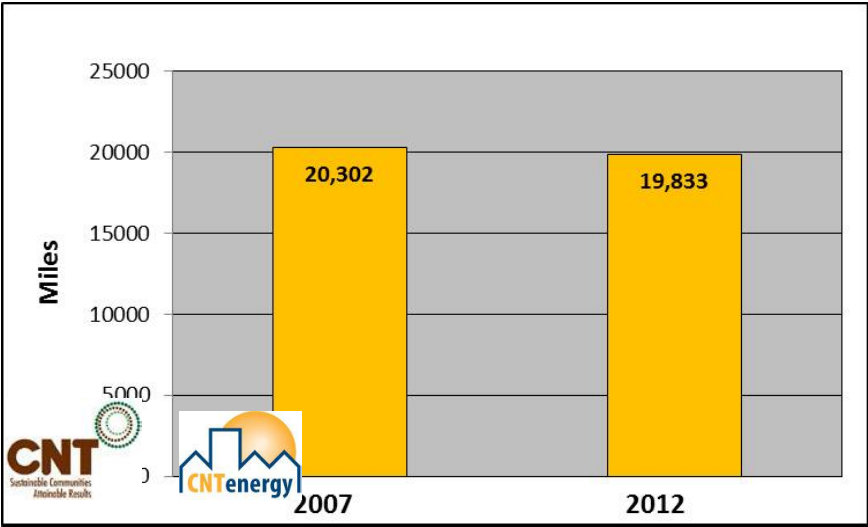
In 2012, total on-road travel on DuPage County roads accounted for 8.42 billion miles (Table 5), which captures trips only within county boundaries. Since 2007 there is a slight decrease of 2% in total vehicle miles traveled. The average household in DuPage County drove 19,833 miles (Figure 5), totaling 6.6 billion miles for all DuPage County households.

Table 5. Vehicle Miles Traveled (VMT), 2007 -2012

VMT	2007	2012
Total On-Road VMT	8,633,562,650	8,424,261,955
Household VMT	6,862,947,547	6,639,375,551

Factors that affect VMT per household include access to jobs, proximity to businesses and amenities, availability of public transportation, and community walkability. Variations are also influenced by many different demographic factors including income, household size, and workers per household. For example, large households with higher incomes may own multiple cars and drive more. Households situated close to reliable public transit or major employment centers may experience decreased annual VMT because they are not as dependent on cars.

Figure 5. Average Vehicle Miles Traveled per Household, 2007 - 2012



Moving Forward – Analyzing 2007 and 2012 Vehicle Miles Traveled

CNT Energy will further analyze this decrease in the analysis phase of the project to be conducted in 2014. It is important to note that nationally, VMT has gone down due to factors including unemployment, high gas prices and changing travel patterns. Some of that has and will continue to bounce back, as may well be the same phenomenon in DuPage County.



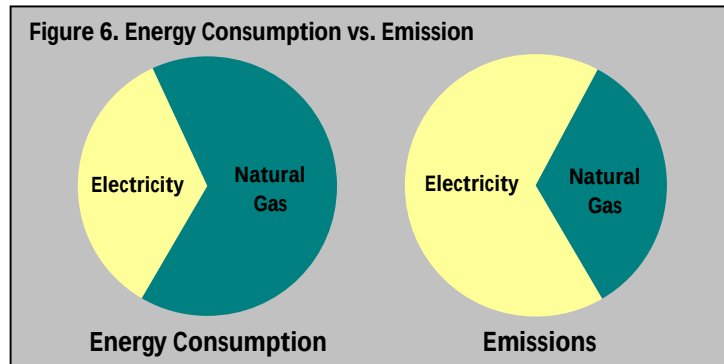
Section 5: Emissions Profile for DuPage County

The Connection between Energy and Emissions

In addition to understanding energy consumption, it is important to recognize the relationship between energy and greenhouse gas emissions. Emissions attributed to electricity consumption are different from those attributed to natural gas consumption because of differences in the production of energy from different sources.

Most of the world's energy originates from the burning of fossil fuels including coal, petroleum, and natural gas. Fossil fuels consist of hydrogen and carbon, and when burned, the carbon combines with oxygen to create carbon dioxide.

However, all energy is not created equal. The amount of carbon dioxide produced for a given unit of energy depends on the carbon content of the fuel source. For example, coal (used to produce electricity) emits nearly two times the carbon dioxide per unit of energy compared to natural gas. Understanding this off balanced relationship is important when calculating emissions and identifying strategies to reduce emissions. Figure 6 illustrates this off balanced relationship between energy consumption and emissions, using data from the Chicago metropolitan region. Understanding this off balanced relationship is important when calculating emissions and identifying strategies to reduce emissions.



Emissions Calculations

Greenhouse gas emissions in this profile were calculated using United Nations Intergovernmental Panel on Climate Change (IPCC) methods and local data sources in combination with modeling of national data to local demographics. All data presented are measured in metric tons (tons) or million metric tons (MMT) CO₂e (carbon dioxide equivalent), to enable comparison internationally.

Emissions were calculated for the six major categories of greenhouse gases regulated under the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Emissions were converted into CO₂e using global warming potentials from the IPCC Fourth Annual Assessment Report. Activity data were translated into emissions using standard emissions factors and global warming potentials.

Emissions Profile for DuPage County

An energy profile in the community serves as the basis for conducting a community greenhouse gas emissions profile. In addition to energy and transportation, which are by far the biggest contributors to greenhouse gas emissions, this emissions profile includes estimates for solid waste, waste water, and product use based on regional totals previously analyzed for a regional profile developed for the Chicago Metropolitan Agency for Planning (CMAP).

Below is a comparison breakdown of county's emissions by sector in 2007 and 2012. (Table 6; Figures 7 and 8) which represents a reduction of approximately 7%.

Table 6. Emissions by Sector, County and Region, 2007 – 2012

Sector	2007 MMT CO ₂ e	2012 MMT CO ₂ e
Electricity	8.40	7.65
Natural Gas	3.10	2.67
Transportation	4.33	4.23
Solid Waste	0.11	0.24
Waste Water	0.12	0.12
Product Use	0.49	0.48
TOTAL	16.55	15.39

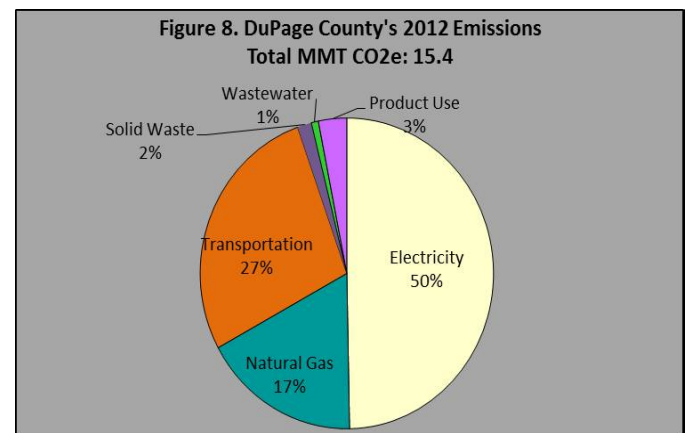
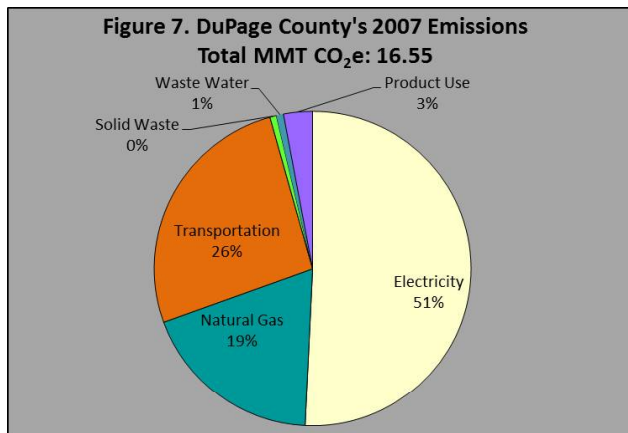
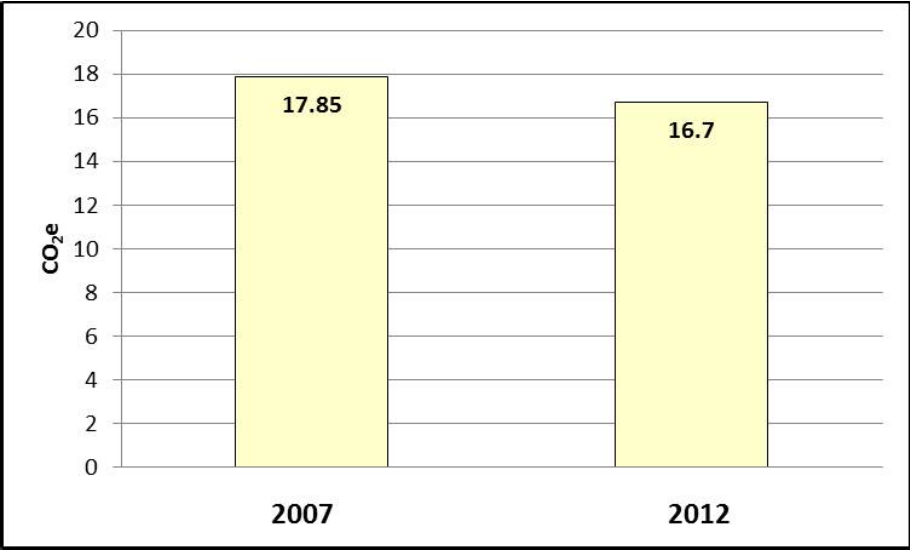


Figure 9 provides another context through comparison of DuPage County’s 2007 and 2012 emissions per capita.

Figure 9. DuPage Per Capita Emissions, 2007 - 2012



Moving Forward – Analyzing 2007 and 2012 Emissions

CNT Energy will further analyze this slight decrease in emissions and per capita emissions in the analysis phase of the project to be conducted in 2014. Aside from the apparent reductions in electricity consumption, natural gas consumption and vehicle miles traveled, we will consider the impact of larger decarbonization trends such as improved miles per gallons in cars and the reduced share of electricity produced with coal, which comes as a result of an increase in renewables and natural gas.

Section 6: Moving Forward

Understanding the difference between 2007 and 2012 data sets

Each section of this report provides a brief comparison analysis between 2007 and 2012 data. Table 7 serves as a recap to the initial findings and topics for more detailed analysis that was intended for this project and is scheduled to be funded in 2014. This deeper analysis will include a closer look at data sources and potential factors for these reductions. If fully funded, the analysis will also include an energy forecast for both 2020 and 2030, and briefly identify the types of common community-scale strategies that would assist DuPage County in achieving its emissions reduction goals by 2020 and 2030.

Table 7. Recap of Initial Findings and Next Steps by Sector

Sector	Findings and Next Steps
Electricity	- Decrease of 7.8% for overall consumption - Future analysis: detailed sector breakdown, data collection differences - Inclusion of Naperville municipal utility sector breakdown numbers, currently accounted for as “commercial” - National trends in electricity consumption/reductions
Natural Gas	- Decrease of 13.6% for overall consumption - Future analysis: data collection differences, particularly whether or not “transport gas” included in 2007 data was left out for 2012 - National trends in natural gas consumption/reductions
Transportation	- Decrease of 2.4% for total on-road vehicle miles traveled - Decrease of 3.2% for total household vehicle miles traveled - Future analysis: whether or not national trends in VMT attributed to fewer jobs and changing travel patterns due to high gas prices are the likely cause of these small reductions
Emissions (overall)	- Findings: Decrease of 7% for total emissions - Future analysis: impact based on consumption reduction versus larger decarbonization trends such as improved MPG in cars and the changing production of electricity (from coal to renewables or natural gas) - National trends in emissions reductions

Further, another goal of this report and pending analysis is to equip the county with the appropriate resources and tools to further conduct its own analyses in future years. With this report and corresponding data spreadsheet, CNT Energy will have done its share to achieve this goal. DuPage County should continue to engage with the utilities as trusted partners who can provide vital energy data in aggregate form for future analyses.

APPENDIX F

DuPage County Board Resolution EN-0001-12
Resolution of Commitment to Sierra Club, Illinois Chapter Cool Counties Program

R E S O L U T I O N**EN-0001-12****RESOLUTION OF COMMITMENT TO
SIERRA CLUB, ILLINOIS CHAPTER COOL COUNTIES PROGRAM**

WHEREAS, DuPage County ("COUNTY") has adopted the DuPage County Environmental Policy ("POLICY") brought forth by the DuPage County Environmental Commission; and

WHEREAS, the POLICY provides that the COUNTY should provide incentives for energy conservation in both public and private buildings and should establish and maintain for monitoring and analyzing energy consumption; and

WHEREAS, the Sierra Club, Illinois Chapter has asked the COUNTY to consider participating in the Cool Counties program which is a nationwide movement of local governments committing to reducing greenhouse gas emissions; and

WHEREAS, the COUNTY has a unique role in reducing greenhouse gas emissions and preparing for the impacts of climate change through their regional jurisdiction over policy areas such as air quality, land use planning, transportation, zoning, water conservation and solid waste management; and

WHEREAS, the program requires that the COUNTY take measurable steps to reduce greenhouse gas emissions at both county-owned assets as well as at all properties within the County's boundaries; and

WHEREAS, the majority of comparative emissions in DuPage County and across the Chicago metropolitan region can be attributed to electricity, natural gas and vehicle miles traveled; and

WHEREAS, the Environmental Committee has reviewed this program and finds that the COUNTY has an opportunity to be an example in the community and can make an effort to reduce internal energy consumption; and

WHEREAS, the COUNTY has limited authority to regulate energy consumption it can serve as an advocate to encourage voluntary reductions; and

NOW, THEREFORE, BE IT RESOLVED by the DuPage County Board that the COUNTY support the Cool Counties program and the CMAP GO TO 2040 PLAN by recommending the following:

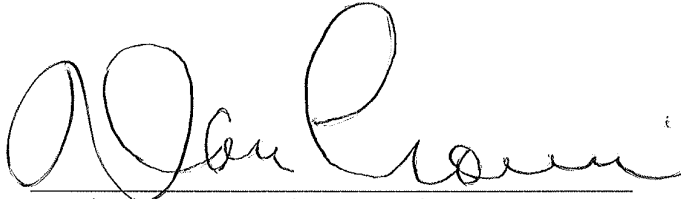
- a. Reduce greenhouse gas emissions to 10% below the 2007 levels by 2020 and 20% below 2007 levels by 2030.

- b. Form an energy efficiency partnership with key entities including corporate and governmental partners.
- c. Continue to lower the COUNTY's campus wide energy consumption.
- d. Encourage non-motorized transportation opportunities and mass transit in an environmentally friendly manner.
- e. Educate consumers about the benefits of buying locally grown food and other items and shopping locally.
- f. Act as a clearinghouse for energy efficient tax-credits and grant opportunities.
- g. Support the State of Illinois' Energy Conservation Code by continuing to enforce the efficient standards.

BE IT FURTHER RESOLVED, that the COUNTY will work on a plan for energy reduction which will specify programs and anticipated costs to reduce energy consumption and such plan will be brought back to the Environmental Committee within one year of this resolution.

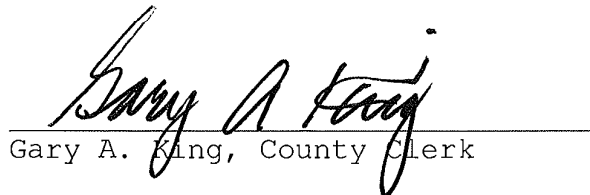
BE IT FURTHER RESOLVED, that the Chairman of the County Board is hereby authorized and directed to authorize the COUNTY's participation in the Cool Counties program.

Passed this 11th day of September, 2012, at Wheaton, Illinois.



Daniel J. Cronin, Chairman
DuPage County Board

ATTEST:

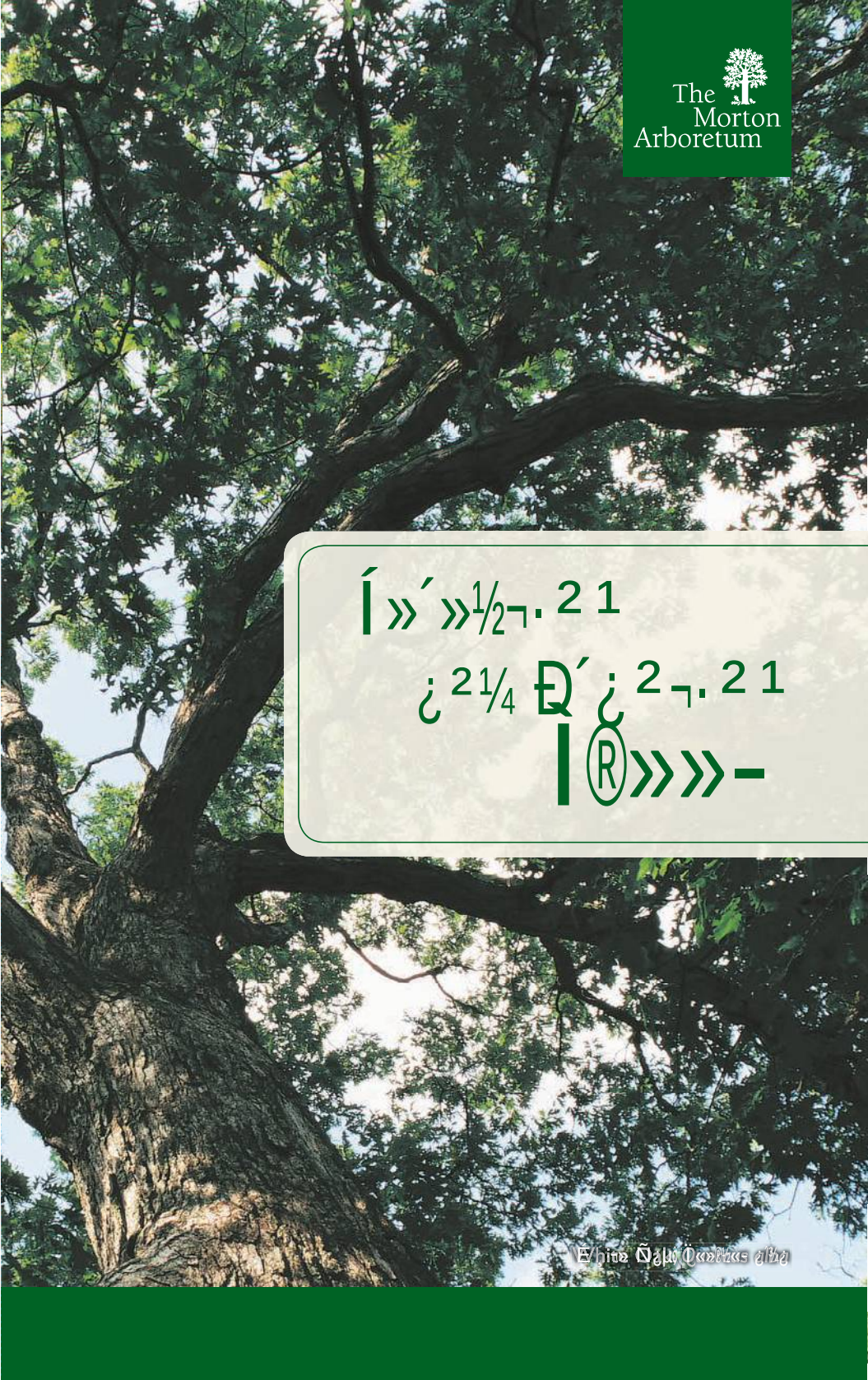


Gary A. King, County Clerk

Ayes: 16
Absent: 2

APPENDIX G

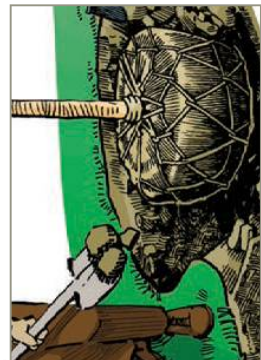
The Morton Arboretum's Northern Illinois Species List and Tree Selector



How to Plant and Maintain Trees

Planting Site Evaluation	i
When to Plant	ii
Choose a Quality Tree	iii
Planting	iv
Why Trees Are Stressed by Transplanting	v
Maintaining Newly Planted Trees	vi

It takes only a short time to plant a tree, but how it is done can have a lasting influence on the tree's future growth. Mistakes made when planting trees usually cannot be corrected later. Improper planting can cause the tree to fail after a short time or to struggle for many years and never reach its full potential as a healthy addition to the urban forest.



The Morton Arboretum has developed these two companion publications to provide current, scientifically based tree selection and planting advice. Selecting and Planting Trees is the result of decades of research on the issues to consider when planting a tree, including planting site characteristics, purchasing a quality tree, planting the tree, and maintaining a newly planted tree. The Northern Illinois Tree Species List describes species that grow well in the area and recommends best planting sites. This list emphasizes the importance of site characteristics and is a tool for broadening the diversity of our regional forest to promote resiliency.

Selecting and Planting Trees
Editor: Gary W. Watson
Photographs: Gary W. Watson
Illustrations: Bryan Kotwica

Northern Illinois Tree Species List
Editorial Review Panel: Kris Bachrell, Gary W. Watson, Melissa Custic, Lydia Scott, John Dwyer, Joseph Rothleutner, Doris Taylor, Sharon Yiesla, Nicole Cavender, Gerard T. Donnelly

Acknowledgments

Special thanks to all those who provided significant input and direction on the species list, especially John Lough and the City of Chicago Bureau of Forestry; Sarah Surro of Conserve Lake County; the Illinois Landscape Contractors Association; and the Ornamental Growers Association.

We also thank other key contributors, including Stephanie Adams, Jim Anderson, Andrea Dierich, Kurt Dreisilker, Kunso Kim, Stephen Lane, Cherie LeBlanc Fisher, Angela Levermier, Suzanne Malec-McKenna, Loren Nagy, Judy Pollock, Rob Sperl, and Doug Tallamy.

© 2015 The Morton Arboretum



This publication was developed in collaboration with the Chicago Region Trees Initiative, a partnership of organizations working together for a healthier regional forest.

Ð'¿2-¿.21 Í-»» Úa¿'«¿-¿.¿2

ABOVEGROUND ENVIRONMENT. Environmental conditions in urban landscapes can differ widely over short distances. The amount of sunlight a tree receives and the time of day the sunlight is received can limit the kind of tree that can be planted.

For example, the environment can be too harsh for some species on sites where heat and light are reflected from nearby buildings or pavement. An area with morning sun and afternoon shade often provides adequate sunlight early and protection during the hottest part of the day. An area with morning shade and direct sun during the hot afternoon hours may be more suitable for trees that are tolerant to heat or drought stress. The intensity of all-day shade can vary from open shade on the north sides of fences or low buildings to very dense shade under low tree branches.

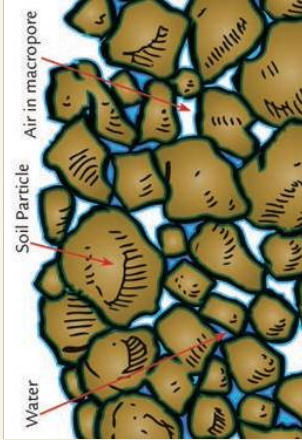
Aboveground space restrictions may need to be considered. Overhead utility wires may limit the size of trees that can be planted. It is a common mistake to plant a young tree too close to a building without sufficient room to grow. Species with aggressive root systems may also heave nearby pavements or contribute to damage to shallow foundations.

IMPORTANCE OF SOILS.

Tree species are adapted to the environment in which they are found in nature. Few urban sites match any natural site or provide optimum conditions for tree growth. Poor soil conditions frequently limit planting success. Poorly drained soils with a high clay content, typical of many urban developments, require special planting procedures to improve survival and establishment.

Soil texture refers to the ratio of different particle sizes in a soil.

Sandy-textured soils are composed mostly of large particles, while clayey soils contain many microscopic particles. Soil structure refers to the size and shape of soil aggregates (soil particles held together in groups by organic compounds). Between the aggregates are spaces that allow movement of air and water through the soil. As a result of compaction, urban soils are often poorly aggregated, with smaller spaces. Incorporation of composted organic matter can help improve structure.



Water held in the micropores by capillary action is held tightly enough to be present in the root zone for extended periods, yet loosely enough for the plant to extract it. Water drains quickly from the larger pore spaces. All of the pores can be filled with water when the soil is too wet, eliminating the air in the soil that roots need.



Soil structure is important. When it is damaged, plant growth is reduced dramatically. Note that growth in the deepest subsoil with structure maintained is as good, or better, than any of the soil layers with structure destroyed.

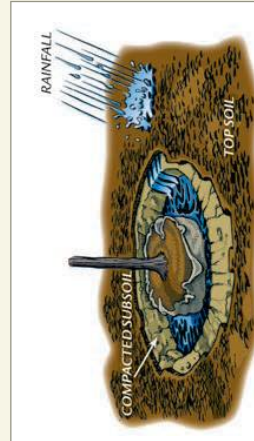
Well-aggregated soils provide optimum aeration and water for plant roots. Soil water and oxygen availability are interrelated. If the majority of the pore spaces are filled with water, there will be insufficient oxygen available for the living roots. Trees killed by too much water are found most frequently in compacted clayey soils.

Drainage affects oxygen and water in the soil and is controlled by a number of factors including precipitation; soil texture and structure; permeability; infiltration characteristics; and landscape position. In the poorly drained, compacted soils typical of urban areas, drainage may need to be improved.

There is a very effective way to determine if soil has adequate drainage. After digging the planting hole, fill it full of water. If the water that fills the hole has not drained appreciably after an hour or two, drainage will be problematic, especially during wet seasons. If the soil is very well-drained, it may be difficult to fill the hole with water because it soaks into the soil so quickly.

Soil (chemical) reaction, known as pH, is a general indicator of nutrient availability. In slightly acid to neutral soils (pH between 5.5 and 7.2), most nutrients are available at optimal levels. Some nutrients, such as iron and manganese, become less available in alkaline soils (pH above 7.2) because of chemical changes caused by the alkalinity.

Alkaline soils are common in urban landscapes and can result in nutrient deficiencies in certain species such as pin oak and river birch. These trees will exhibit yellow leaves, a condition known as chlorosis. Other nutrients also become less available in highly acid soils (pH less than 5.5), but these soils are not often encountered in urban landscapes.



Water that cannot penetrate compacted subsoil flows laterally to the lowest point. Planting holes can fill up with water and damage the root system.

SALT DAMAGE: De-icing salts from airborne deposits and runoff from melting snow on pavements can accumulate in the soil. High levels of soil salts can dehydrate tree roots and damage the entire plant. Excess sodium leads to poor soil structure, resulting in reduced soil permeability and poor aeration.

ROOT SPACE: Just as a potted plant can grow too large for the volume of soil in the container, a landscape tree can grow to a size where it becomes too large for the available root space. Roots typically spread further than the branches and most urban sites restrict root spread to at least some degree. Buildings are obvious restrictions to root spread, but pavement also limits root development. The compacted soil required to support a stable pavement surface and the impervious nature of the pavement itself severely limit root growth underneath the pavement. Growth of trees will be restricted in less than 20 years if there is less than 200 square feet of open soil around them. Smaller spaces will reduce growth sooner and to a greater extent.

Site Evaluation Checklist

Carefully evaluating the site in advance is critically important for successful tree selection and planting. Many trees fail because the site characteristics are either improperly evaluated or ignored entirely.

Above Ground

☒ Sunlight exposure (hours of sunlight, reflected light, and heat load)

☒ De-icing salt usage

☒ Pollution

☒ Overhead wires

☒ Proximity to buildings, structures, light fixtures, and signs

☒ Potential for vandalism

Below Ground

☒ Soil pH

☒ Soil texture and structure

☒ Soil compaction

☒ Drainage

☒ Soil salinity and other soil contaminants

☒ Root space restrictions

É, »² ±± Ð'¿²~

Survival is likely to be greatest and aftercare least demanding when a tree is transplanted while dormant. Spring and fall also have the advantage of moderate temperatures and plentiful rainfall. Summer planting is possible if a judicious watering program is followed, particularly if the tree was dug from the nursery in spring, or grown in a container.

All tree species can be dug from the field successfully in early spring. Some species, but not all, can be dug successfully in the fall. Those that cannot be dug in the fall can be dug in the spring and held for fall planting with proper care. The optimum time for fall planting is when there are several weeks of warm soil temperatures (above 50°F) that can support active root growth. Evergreens may benefit from a longer duration of warm soil to promote root regeneration after fall planting because they can lose considerable water through their foliage during fall and winter months.

Ý, ±±-»¿ İ «¿'~§ İ®»»

Choosing a high-quality tree contributes to planting success. It is important to know the source of the trees you purchase. If the tree was grown in a local nursery for several years, there is a good chance that it is adapted to the local climate.

NURSERY STOCK TYPE: Many choices of nursery stock are available from the nursery or garden center. Choosing the best nursery production method for each situation is essential. Each method has certain advantages and none is best for every situation.

Bare-root plants are moved without soil, so the roots are exposed and must be protected to keep them from drying out. Bare-root trees are usually less than two-inch caliper and should be planted in late winter or early spring to allow as much time as possible for fine root development before the leaves emerge.

Ball-and-burlap (B&B) is the most common method of transplanting field-grown trees. A ball of soil containing a portion of the root system is wrapped in burlap and twine or wire basket and moved with the tree. These materials stabilize the root ball during transport.

Container-grown plants are grown in specially designed plastic containers. Because no digging is involved, container plants do not suffer substantial root loss during transplanting. However, container soils are very well-drained and the trees will still require frequent irrigation in the landscape to avoid water stress until their roots can spread into the surrounding soil. Cold winter temperatures that kill roots in above-ground containers limit container production of trees in northern Illinois unless additional root protection is provided. Trees in larger containers sold in local garden centers may be shipped from warmer climates and may not be hardy.

TREE HEALTH. Trees should

exhibit vigorous growth during the most recent two to four years and have well-formed buds. Normal twig growth may vary from six to 24 inches annually and should be characteristic of the species.

Trees should be vigorous specimens, free from insects and diseases.

The trunk's bark should be firm, with no indication of disease, insect galls, wood borers, dieback, frost cracks, sun scald, or mechanical injury.



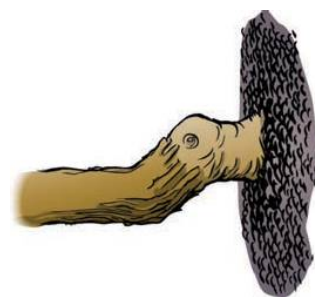
Avoid trees with codominant stems and included bark.

BRANCH STRUCTURE. Branches

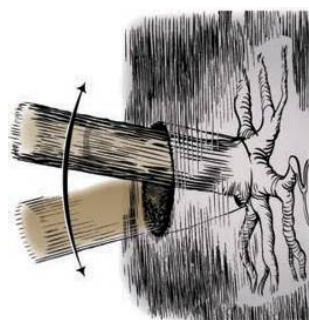
should be well spaced, both vertically and around the circumference of the trunk, for strong attachments and unrestricted flow of water and nutrients. Branches should diverge from the trunk at a wide angle except in cultivars that normally grow in narrow, upright forms. Ideally, a tree will have a single central stem. Two vertical trunks or stems that are nearly equal in diameter are known as codominant stems and are weaker in structure. Trees with codominant stems or included bark (bark imbedded between codominant stems or between branch and trunk) should be avoided.

CHECKING STRUCTURAL ROOT DEPTH. As a general rule for young nursery-grown trees, the large woody roots should be no more than an inch or two below the soil surface and should be well-distributed in all directions.

If you can see the roots emerging from the base of the trunk at the soil surface, it is an indication that the roots are at the correct depth. Some soil may have to be removed



In some production systems, liner stems are cut back during production, creating a visible wound and crook in the stem. If visible, this is an indication that the tree is planted at the same depth as originally planted in the nursery.



As the trunk moves in the wind, a gap forms around it if the roots are too deep. The deeper the root flare is buried, the wider the gap will be at the surface.

to see the top of the roots. Movement of the lower portion of the trunk, forming a gap between the trunk and the surrounding soil, is a sign that the roots are too deep. Many nursery-produced trees are grafted, with the trunk and branches of one species grafted onto the root system of another. These trees will have a bud union that should be visible about one to two inches above the soil.

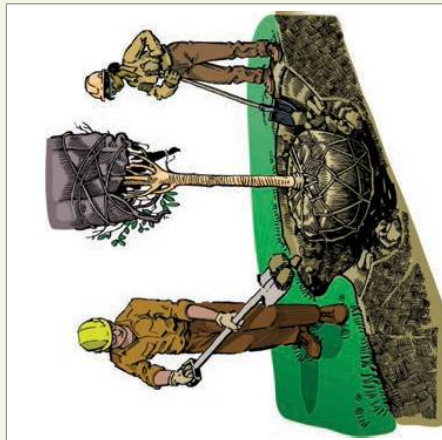
D'2-21

Attention to detail at planting time will pay dividends for many years. Mistakes made when planting trees usually cannot be corrected later.

PLANTING HOLE DEPTH AND WIDTH. On sites with poor quality soil that is compacted, clayey or poorly drained, the planting hole should be *at least twice* the width of the roots to accommodate root development during the first year. If the roots are unable to grow into the

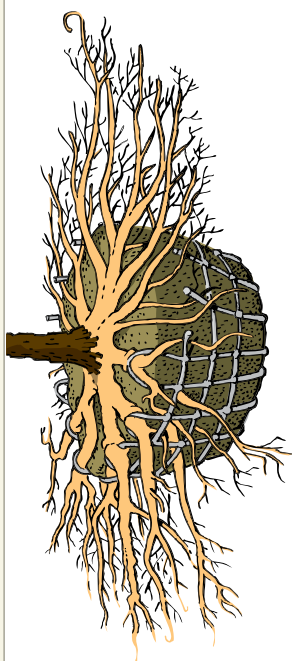
compacted subsoil, a hole with sloped sides will direct them back up toward the better-quality surrounding surface soils so they can spread beyond the planting hole. If a tree spade is used to transplant the tree, a similar effect can be achieved by cultivating the soil around the root ball to a depth of at least eight to 12 inches in a circle that extends at least half the width of the root ball. On sites with high-quality soil, the planting hole needs to be only wide enough to facilitate planting. If the sides of the hole dry out before you fill the hole back in, use a hand tool to break up the surface.

Roots of bare-root plants should be spread out so they do not circle or kink in the hole. The planting hole for B&B stock should be slightly shallower than the root ball to allow for flattening and settling of the root ball. Planting with the top of the root ball two inches above the surrounding grade is adequate for a two- to three-inch-caliper tree. The root ball should be placed on a stable subgrade to minimize settling.



The planting hole should be only as deep as the root ball. A hole with sloped sides is easier to dig and provides an increased volume of friable soil for vigorous root development from the upper half of the root ball. Breaking down the sides of a traditional hole can reduce the work involved.

STRUCTURAL ROOT DEPTH. The uppermost large woody lateral roots of bare-root stock should be planted within one to two inches of the soil surface. If the roots are slightly deeper in the root ball, the planting hole should be shallower to account for it. Do not remove the extra soil until the planting hole is backfilled. In some situations it may be preferable to leave the extra soil in place and allow it to erode away. Mulch can be used to cover the protruding root ball and make a more gradual slope.



If the upper half of the basket is removed before backfilling, most future root problems will be prevented.

REMOVING ROOT BALL WRAPPING MATERIALS. Remove all basket wires down to four to six inches below the top of the root ball so that the structural roots can grow above the wires and not be constricted in the future. Low-profile baskets are designed so that no wire needs to be removed. If synthetic materials, such as nylon twine or plastic burlap, are used, they should be removed completely. Natural burlap and twine usually decompose in the first season, but it still is preferable to remove them from the upper half of the root ball to be sure there is not a second layer of synthetic burlap or twine underneath that needs to be removed.

ELIMINATING ROOT DEFECTS.

Container-grown plants can have many root defects. Because the natural spread of the root system is restricted by the container, lateral roots reaching the sides are deflected and can circle, ascend, descend, or kink. All these abnormal roots can eventually affect tree health and stability.



Shaving the container root ball is the best way to eliminate roots growing along the container wall.

The best way to eliminate root defects on the exterior of the root ball is to shave off a thin layer of the entire outer surface of the root ball. This will allow new roots to grow radially from the trunk, as they do in nature. Defects can also be present in the interior of the root ball from smaller containers used earlier in the production process. These cannot be corrected and this poor-quality stock should be avoided.

BACKFILLING THE PLANTING HOLE. Soil amendments may be added to the soil used to backfill the hole on sites with poor quality soil. They can improve soil structure, water-holding capacity, and drainage for better root growth. Add approximately 10 percent composted organic matter by volume, depending on the material. On sites with high-quality soil, there is no need to add any amendments. Compact some of the excavated soil around the base of the root ball to stabilize it. The rest of the soil should be tamped only lightly in the hole or left to settle on its own. Watering will assist in settling the soil naturally. Excessive tamping, especially when the soil is wet, can compact the soil and slow water penetration and root growth.

TRUNK PROTECTION. Plastic guards can help to protect trunks from mowers, weed whips, and other mechanical injuries. If used, they must be removed before the trunk grows large enough to be damaged by constriction. Trunks of trees with thin or smooth bark are sometimes wrapped to prevent sunscald injury from winter sun. Wraps should be light in color, porous to water, and biodegradable. The wrap should be applied in late fall from the bottom up so that it overlaps like roof shingles, and removed in the spring. A helpful way to remember is to apply the wrap around Thanksgiving and remove it around Easter.

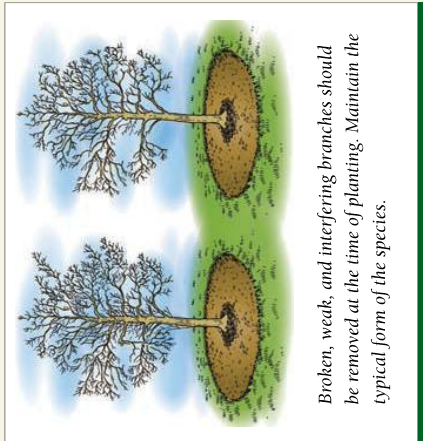
STAKING. Staking, guying, or bracing refer to mechanically supporting the trunk of a planted tree to keep it in an upright position. Container-grown and bare-root trees may require support until lateral or anchor roots develop. *Staking is not usually necessary for properly handled and planted B&B stock.* If the root ball is in good condition and has been stabilized by compacting soil around the base, the tree is not likely to lean or shift. There may be a few exceptions, such as very windy sites or sandy root balls. Two stakes with separate flexible ties are commonly used but three stakes will provide better support. Supports should be removed after one year to avoid trunk girdling.

WATERING. Water the root ball thoroughly after planting. Ten to 15 gallons is sufficient.

MULCHING. Properly applied mulch can increase tree growth in the first few years after planting. Apply mulch in an even layer over the planting hole and slightly beyond it. The mulch layer should be one to three inches deep after settling. Mulch should not be allowed to contact the base of the trunk. Avoid the common practice of applying mulch in a small, deep ring around the base of the trunk.

FERTILIZATION. Do not fertilize a newly planted tree. Until the root system can grow large enough to absorb more water, adding fertilizer is ineffective.

PRUNING. It is important to ensure the best possible branch structure while a tree is young. A central leader with adequately spaced lateral branches is the strongest structure a tree can have. Trees that are correctly pruned during production in the nursery should not require substantial pruning when planting. Because of the fast growth rate in the nursery, even high-quality nursery stock may benefit from minor structural corrective pruning to promote good branch structure. Cut back rapidly growing, upright, lateral branches that might compete with the central leader for dominance. Also remove all crossing branches and any twigs that were broken during transport.



Checklist

The final step in the planting process is inspection. There are many items that need to be checked:

- | | |
|---|---|
| ☒ Is the planting depth correct? | ☒ Has mulch been applied in a light layer over the entire planting hole? |
| ☒ Have the upper portions of the root ball wrapping materials been cut away? | ☒ Has the mulch been pulled away from the trunk of the tree? |
| ☒ Have the roots growing against the inside of the container been eliminated? | ☒ Were the root ball and backfill soil watered thoroughly? |
| ☒ Is the trunk straight? | ☒ If the tree needed staking, do the ties allow for growth and movement of the trunk? |
| ☒ Has the tree been pruned to correct structural defects? | |

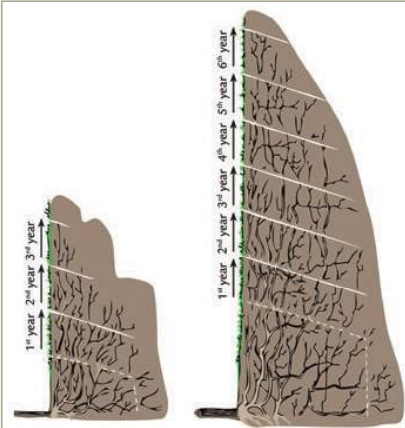
É, § Ì®»»- ß® Í-®»-»¼ ¼\$ Ì®¿ 2 - °' ¿ 2-¿ 2 1

When a field-grown tree is dug from the nursery, most of the root system remains behind. The amount of water available to the partial root system in the root ball is a small fraction of what was available before digging. Even though root loss of container-grown plants is minimal when planted, their roots are confined to an abnormally small soil volume in the container, so the situation is very similar to a BSRB tree. Initially after planting, both container and field-grown plants face the same challenge of marginal or insufficient water absorption by the root system. Until they can grow a normal

spreading root system, newly planted trees are dependent on frequent irrigation. Water stress is a common cause of planting failure.

Roots grow at an average rate of approximately 18 inches per year in the Midwest climate. A three-inch-caliper tree will require approximately three years to completely replace the roots that were lost in transplanting. Root growth rates are similar for large and small trees, but the distance that roots must grow to redevelop the full spreading root system is much greater for a larger tree. A larger tree will require more annual root growth increments to replace the original root system after planting.

Until the root system is established, stress and reduced growth are common. The annual twig growth can be reduced substantially for the first year or two after transplanting. Stressed trees are susceptible to some serious disease and insect problems, such as wood borers and canker diseases, that don't usually affect established, vigorous trees. Proper maintenance helps minimize stress and increase natural resistance, but chemical control may be necessary at times. When attempting to manage pests, it is important to distinguish serious problems that justify chemical treatment from cosmetic ones for which chemical applications are unnecessary or even harmful. For example, wood borers would be considered a serious problem, whereas most late-season leaf diseases would not.



Several years of root growth are required for a newly planted tree to fully reestablish its root system. Roots grow at a similar rate regardless of tree size, but for a larger tree, roots must grow over a longer distance to redevelop a normal root spread after transplanting. This requires more years of growth and results in a longer establishment period for a large tree.

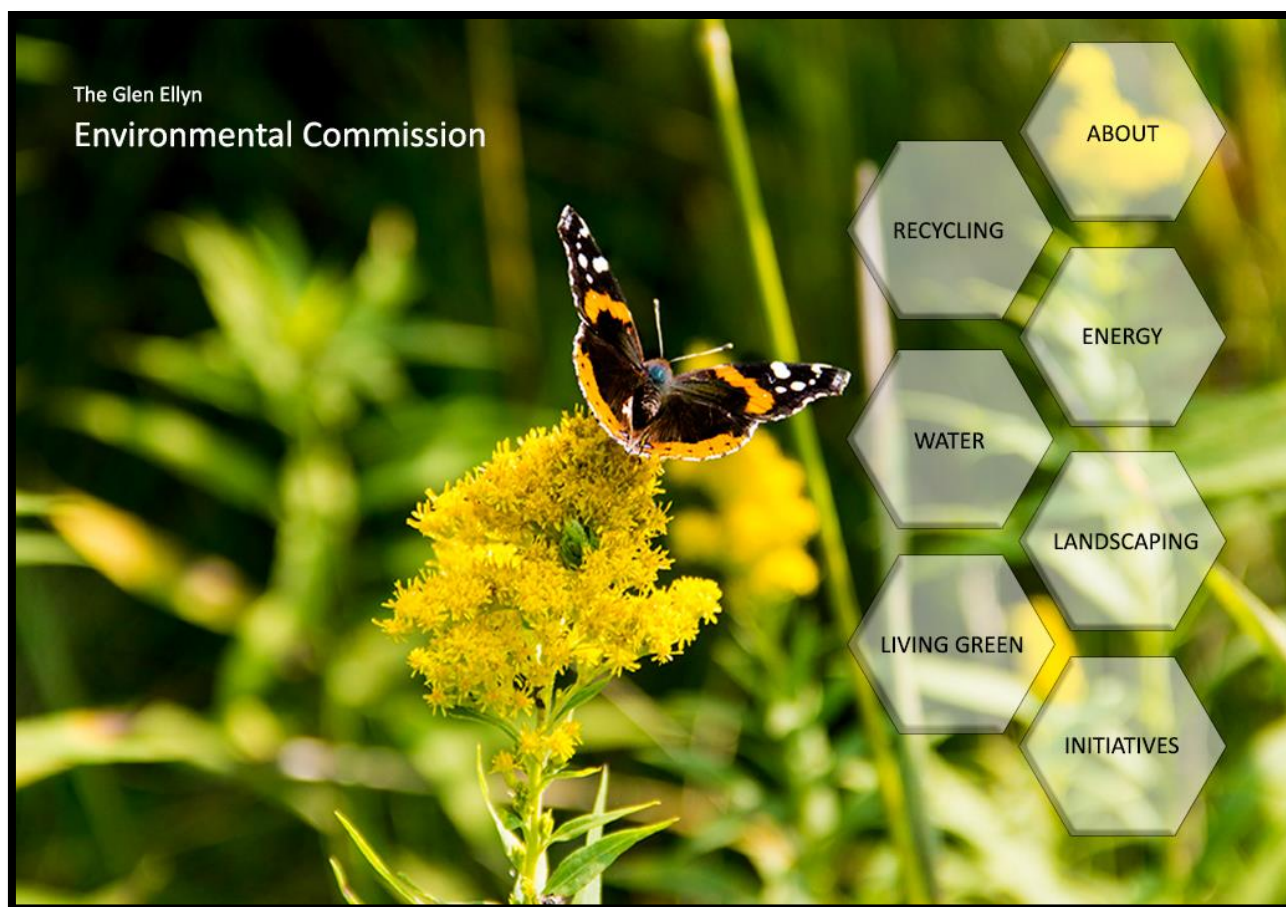
Ó¿ 2-¿ 2.21 Ô»©\$ Ð¿ 2-¼ Ì®»»-

Trees need maintenance throughout their lives but it is particularly important during the period of establishment after transplanting. As long as there is only a fraction of the tree's normal root system present to absorb water, the tree will require extra care.

WATERING. Proper watering is the single most important aspect of maintenance of transplanted trees. In the first year or two, it is important to keep the root ball moist but not over-watered. The root ball soil is the major source of water for the tree until the root system redevelops. Surrounding soils where there are few roots absorbing moisture often stay moist, while the root ball quickly dries out. During this time, monitor the moisture in the root ball. Throughout the warm, summer weather, the tree will

GLEN ELLYN ENVIRONMENTAL COMMISSION

Strategic Alignment Plan



August 15, 2016

Strategic Alignment

Recently, the Village of Glen Ellyn generated its 2014-2017 Vision and Strategies Plan (September 2013). The Glen Ellyn Environmental Commission (EC) would like to build on the Vision and Strategies Plan and align the work of the Commission with these efforts as well as examine additional opportunities for the future.



The Commission works with Village staff and Village residents and businesses on environmental issues and opportunities, as well as encourages conservation practices through hands-on activities within the community. As it relates to Village practices, the Commission reviews Village ordinances and contracts when they have an environmental impact, in order to suggest areas of improvement. In order to better serve the Village, the residents and businesses, and the environment, the Commission asked Northern Illinois University's (NIU) Center for Governmental Studies (CGS) to design a strategic alignment session focused on establishing a vision, mission, and goals/strategies for the EC that will support the Village's most recent plan. The outcome is a proposed action plan based on a vision and mission for the Glen Ellyn Environmental Commission.

Strategic Alignment

- The process of bringing the actions of an organization's divisions and staff members into line with the organization's planned objectives.
- Ability of an organization to achieve strategic goals benefit from performing a comprehensive strategic alignment assuring all divisions are jointly working towards the stated goals.



NORTHERN ILLINOIS UNIVERSITY

Center for
Governmental Studies

Outreach, Engagement, and Regional Development

Survey of Environmental Commission Members

To make the most of the alignment session, a pre-session survey was sent out to all members of the EC to gather input on the current vision, mission, and Village goal alignment possibilities. All EC members participated. The survey results were then used in the first planning session as a starting point for discussions. The first session was held on February 18, 2016 with a second follow-up session held on February 24, 2016 to finalize the vision, mission, and goal alignment strategies. The information presented next is the result of the two planning sessions.

Strategic Alignment Planning Sessions

At the first session on February 18, 2016, after introductions, the attendees moved on to discussing and reaching consensus on the best mission and vision for the EC. The facilitator discussed first what components a vision needs in order to be strong and meaningful.

Vision

- **Defines the optimal desired future state - the mental picture - of what an organization wants to achieve over time;**
- **Provides guidance and inspiration as to what an organization is focused on achieving in five + years.**
- **Is written succinctly in an inspirational manner that makes it easy for all employees to repeat.**

The facilitator then shared a draft vision statement based on input from the survey. After discussion at both sessions, the vision was modified and agreed upon by the EC.

Glen Ellyn Environmental Commission Vision

Glen Ellyn is an environmentally and culturally rich village that is regarded as one of America's best places to live, work, learn and play through its commitment to sustainable practices in all aspects of community development.



After the vision was discussed, the EC focused on writing a mission statement. Again, the facilitator discussed what a mission statement should include.

Mission

- **Defines the present state or purpose of an organization;**
- **Answers three questions about why an organization exists -**
 - **WHAT it does; WHO it does it for; and HOW it does what it does.**
- **Is written succinctly in the form of a sentence or two, but for a shorter timeframe (1-3 years).**

The facilitator then shared a draft mission statement based on input from the survey. After discussion at both sessions, the mission was modified and agreed upon by the EC.

Glen Ellyn Environmental Commission Mission

The Glen Ellyn Environmental Commission supports the stewardship of Village resources through development of environmentally responsible initiatives that promote a healthy and informed community.

Inform.

Enhance.

Conserve.

With both an agreed upon vision and mission, the EC was able to focus on how to align its current focus areas, as well as future initiatives with the Village's Strategic Plan.

Four Focus Areas

Currently, the EC focuses its efforts in four main areas:

1. Arts & Outreach,
2. Transportation, Health & Wellbeing,
3. Recycling, and
4. Sustainable Landscaping

The survey revealed that each of the areas were about equally valued by Commission members. Ultimately, the EC decided that these four focus areas were of the greatest need, and exhibited the most potential, for the Village. With the four focus areas in mind, the EC worked within the five strategic areas identified by the Village and created strategic goals with action items that were in alignment. Next is the proposed alignment plan.



NORTHERN ILLINOIS UNIVERSITY

**Center for
Governmental Studies**

Outreach, Engagement, and Regional Development

ENVIRONMENTAL COMMISSION STRATEGIC ALIGNMENT PLAN

I: Development

Strategic Goal: With any real estate development activity, the environmental commission will evaluate the environmental impact and how to best conserve and enhance our environment.

Action Items:

1. Establish an Environmental Commission liaison appointment to the Plan Commission and/or Capital Improvements Commission
2. Promote any level of LEED Certification
3. Continue to Promote energy efficient construction methods and practices in residential, commercial, and public buildings
4. Promote sustainable and native landscape plans and practices
5. Promote better, long-term storm water management practices
6. Enable commercial recycling
7. Encourage bicycle-friendly infrastructure
8. Encourage green spaces and improved Tree Preservation

II: Business

Strategic Goal: Strengthen our local business environment.

Action Items:

1. Promote better business use of our public sidewalks
2. Promote more creative and relevant downtown events
 - a. Encourage Chamber of Commerce and Downtown Alliance to consult with Environmental Commission on CBD events
 - b. Taste of Glen Ellyn-Explore ways to encourage Chamber of Commerce to include and promote local restaurants in the event
 - c. Expand music events to include College of DuPage (WDCB) and local entertainment
 - d. Enhance use of Glen Art Theater, including establishing film festivals
3. Enable a commercial recycling program
4. Develop Environmental Sustainability Award to recognize local businesses and property owners
5. Explore creative opportunities to leverage the potential economic benefits of the Prairie Path, including a Divvy Bike Pilot Program, via a partnership with other communities along the path
6. Continue with “Dark Windows” initiatives

III: Attractions

Strategic Goal: Create, enhance and promote amenities that make Glen Ellyn a great place to live, work and visit.

Action Items:

1. Continue to emphasize the importance of aesthetic and diverse plant species throughout the Village
2. Establish a Sustainable Gardens Award Initiative
3. Promote sidewalk cafes
4. Promote pocket parks, gardens, and special event plazas, including pocket band shell
5. Develop enhanced Prairie Path and Central Business District pathway connectivity through improved way-finding signage and/or infrastructure enhancements
6. Promote “Arts & Outreach”, including permanent and seasonal art installations and special events

IV: Communication

Strategic Goal: Promote the awareness of environmental issues that affect the well-being of Glen Ellyn and its residents.

Action Items:

1. Establish a clear process for regular communication between Village Board and Environmental Commission
2. Establish semi-annual meetings, chaired by Village President, with Chairs of all Village Commissions and the Village Manager
3. Establish liaison appointments of Environmental Commissioners to the Plan Commission and Capital Improvements Commission
4. Establish an active volunteer registry of those Village residents interested in assisting with, contributing to, or participating in Environmental Commission’s initiatives and programs
5. Develop a “State of the Glen Ellyn Environment” Annual Report to the Village Board and/or Village that reports on accomplishments and on-going initiatives
6. Continue to explore ways to improve the Environmental Commission’s webpage & Village’s webpages, social media, and newsletters as a means to better convey environmental initiatives, concerns, etc.
7. Continue to publish Spring “Environmental” Newsletter
8. Enhance communication with developers, real estate agents, and other private entities on environmental sustainability best practices

9. Continue to develop Environmental Commission sponsored seasonal posters in CBD Big Belly containers
10. Continue to invest in the Village's residential rain barrel reimbursement program
11. Continue to sponsor the Village's annual Recycling Extravaganza Event
12. Continue to promote residential "backyard" composting within the community.

V: Infrastructure

Strategic Goal: Promote and develop environmentally friendly infrastructure.

Action Items:

1. Work with Village to develop an environmental sustainability plan and goals
2. Construct bicycle-friendly transportation infrastructure, including connection from Great Western Trail to Prairie Path
3. Encourage sustainable landscaping practices, including native or perennial plantings for all public landscaping and streetscape projects
4. Improve our public and private storm water management
5. Preserve, improve, and create open spaces, including pocket parks and plazas.
6. Improve Prairie Path Park and continue to restore Prairie Path
7. Promote 100% green energy (i.e. Renewable Energy Credits) with municipal aggregation program
8. Explore opportunities to expand use of Big Belly refuse/recycling containers in CBD
9. Implement Residential Curbside Composting Pilot Program
10. Develop an environmentally friendly parking structure in the CBD, including:
 - a. Facilities to capture rainwater
 - b. Roof top park/green space
 - c. Pleasant pedestrian experience

VI: Financial Sustainability

Strategic Goal: Evaluate how environmental initiatives can save money and generally improve our economic environment over the short and long terms.

Action Items:

1. Consider retaining an environmental sustainability intern who could assist the Village in addressing its environmental sustainability goals
2. Consider joining Cool DuPage
3. Identify federal/state/private grants and funding opportunities
4. Incentivize building and infrastructure sustainability initiatives
5. Promote business and residential sustainability initiatives
6. Develop and implement a fund-raising partnership with the DuPage Foundation



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 09/19/16 06:30 PM
Department: Administration
Department Head: Al Stonitsch
Category: Commission Recommendation
Prepared By: Brendon Mendoza

SCHEDULED

AGENDA ITEM (ID # 2422)

DOC ID: 2422

Proposed Lambert Lake Stewardship Program.

Background

As requested by the Glen Ellyn Environmental Commission, Village staff has worked in collaboration with the Environmental Commission to develop a proposed pilot stewardship program for the Village's Lambert Lake property located adjacent to the Village's Public Works Facility at 30 S. Lambert Road. Lambert Lake is currently overseen and maintained by Village Links/Reserve 22 Ground Maintenance Division. Through the proposed pilot program, Golf Course Superintendent Chris Pekarek would work with the Environmental Commission to create a master plan in order to maintain and improve the beautification of the natural habitat of the Lambert Lake site.

Pilot Lambert Lake Stewardship Program Points of Consideration

Creation of a Lambert Lake Master Plan

As the main objective of this pilot stewardship program is to improve the Lambert Lake habitat, the Environmental Commission will be asked to develop a master plan. The master plan is to include a listing of areas for improvement, the existing state of the site, and also specific plans for improvements. The master plan for Lambert Lake will be created collaboratively both the Environmental Commission primary steward, and also Golf Course Superintendent Chris Pekarek.

Glen Ellyn Environmental Commission Responsibility for Administering the Stewardship Pilot Program

The Glen Ellyn Environmental Commission would assume responsibility for the coordination of volunteers in collaboration with Golf Course Superintendent Chris Pekarek. The Environmental Commission would also be responsible for appointing a primary steward that will be required to be an appointed member of the Environmental Commission. This will ensure long-term commitment to secure this program into the future. The appointed Environmental Commission primary steward will be responsible as a direct liaison for Village Links Staff, soliciting volunteers, coordinating responsibilities of volunteers, and also ensuring that volunteers are following proper safety procedures. Environmental Commissioner Andrew Van Gorp will be designated as the initial primary steward for the pilot program. Commissioner Van Gorp has extensive experience in stewardship programs as he currently is a primary steward of the Churchill Woods stewardship program that is overseen by the Forest Preserve District of DuPage County. Commissioner Van Gorp has also volunteered with the reforestation efforts of the Village's Manor Woods site.

Glen Ellyn Park District Collaboration

The Glen Ellyn Park District currently provides free guided nature hikes in the local parks and forest preserves of Glen Ellyn, one of which is Lambert Lake. Village staff has had informal dialogue with the Glen Ellyn Park District to develop a guided tour through the Lambert Lake site, to compliment the proposed pilot stewardship program along by showcasing the natural habitat. Village staff will continue to explore this opportunity with the Glen Ellyn Park District.

Volunteer Identification Cards

In order to ensure that volunteers are able to be properly identified by Village staff, and the public, Village staff recommends providing Village issued volunteer identification cards. Identification cards can be produced in-house at a nominal expense.

Volunteer Insurance

Village staff has reached out to other similar organizations, who currently utilize stewardship programs in their respective communities. Based upon the survey findings, Village staff recommends providing waivers for volunteers, in order to waive any liability of the Village that may occur as a result of the pilot stewardship program.

Village staff surveyed other local organizations that have established volunteer stewardship programs in order to identify how volunteers are typically insured by the host organization.

Organization	Insurance Provided	Insurance Waiver
Morton Arboretum	X	
DuPage County Forest Preserve		X
Conservation Foundation		X

Budget

Village staff expects the expenses related to the proposed Lambert Lake Pilot Stewardship Program will be nominal during the initial year. The Village Links/Reserve 22 will absorb the expenses incurred during the initial year of the program (i.e. tools, gloves, pesticide application, and identification cards). If the Environmental Commission would like to expand the program in future years that would require additional funding, Village staff will return to the Village Board for review and consideration.

Recommendation

Village staff recommends the Village Board to approve the proposed Lambert Lake Pilot Stewardship Program as presented.

Action Requested

Village staff requests input and direction from the Village Board to move forward with the proposed program. If approved, Village staff will return at the next Village Board meeting with a formal resolution to adopt the Lambert Lake Stewardship Pilot Program.

Attachment

1. Environmental Commissioner Van Gorp's Case Support for Lambert Lake Stewardship Pilot Program
2. Lambert Lake Site/Location Map

Agenda Item (ID # 2422)

Meeting of September 19, 2016

ATTACHMENTS:

- Environmental Commissioner Van Gorp's Case Support for Lambert Lake Stewardship Pilot Program (PDF)
- Lambert Lake Site/Location Map (JPG)



CASE FOR SUPPORT



Lambert Lake Stewardship Pilot Program

Lambert Lake Stewardship Pilot Program

WHEREAS: Budgetary constraints are ever-present; and,
WHEREAS: the Villagers of Glen Ellyn value and appreciate Lambert Lake as an important local amenity worthy of volunteer stewardship; and,
WHEREAS: invasive species removal is necessary to prepare a site for cost-effective controlled burns which restore greenspace to environmentally healthy status; and,
WHEREAS: the Village of Glen Ellyn Environmental Commission and Village of Glen Ellyn Board both identified maximizing utilization of natural amenities as a priority in their Strategic Alignment and Strategic Plans, respectively; and,
WHEREAS: the DuPage County Forest Preserve has a successful model for stewardship ripe for replication on the municipal level; and,
WHEREAS: water is sacred for all human and non-human life; and,
WHEREAS: native riparian plants improve water quality in numerous ways; and,
WHEREAS: Lambert Lake provides a unique haven for wildlife;

BE IT RESOLVED: The Village of Glen Ellyn will move forward with a one-year pilot of a Stewardship Program in which volunteers may sign up to become trained in restoration techniques by the Glen Ellyn Environmental Commission and be given responsibility to oversee a parcel of Village of Glen Ellyn greenspace as a certified Steward. Upon the end of the one year program the Village of Glen Ellyn Environmental Commission will reassess the success of the program and propose alteration, expansion, or termination of said program.

Goals:

The goal of this pilot project is to bring Lambert Lake into a state of high conservation status. The oak woodland that was planted next to the lake can be stewarded until maturity. The riparian zone around the lake can be replanted with native species. The hillside on the East end of the site can be planted with wildflowers. The field can be burned annually and seeded with a slow succession of prairie forb seed. Volunteers will not be herbiciding, but will be communicating to the Village Links where they have cleared and the VL will herbicide. The Village will utilize its social media to find a steward and promote volunteer days.

Overview:

Land managers, (Chris Pekarek for Lambert Lake and Panfish Park, Julius Hansen for Manor Woods) will work with the Environmental Commission to develop a site plan for and throughout each site. In this way the Village, EC, and Steward will all have a clear and concise conservation plan for the entire site.

Tools:

- Loppers
- Saws
- Gloves
- Safety Glasses

Other Potential Sites:

- Manor Woods
- Panfish Park
- Perry's Pond
- Other Village-owned sites

Considerations:

- Will the Village of Glen Ellyn insure volunteers similar to how the DuPage County Forest Preserve insures volunteers?
- Would the Village be willing to work with the Conservation Foundation to insure it's volunteers similar to the West Chicago Prairie Working Group?
- Would the Village be willing to pay for ID cards for volunteer stewards to allow for local authorities to understand their stewardship role?
- Would the Village be willing to pass oversight of the Stewardship Program to the Glen Ellyn Environmental Commission?



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 09/19/16 06:30 PM
Department: Administration
Department Head: Al Stonitsch
Category: Discussion Item
Prepared By: Al Stonitsch

SCHEDULED

AGENDA ITEM (ID # 2423)

DOC ID: 2423

Environmental Commission 2017 funding request.

Background

The Environmental Commission (“the Commission”) has undertaken various initiatives throughout the years to improve the local environment and increase the community’s awareness about important environmental topics. The annual Recycling Extravaganza, annual partnerships with Hadley School on Problem Based Learning projects, Big Belly solar powered CBD trash receptacle pilot program, Bike Repair Station, Save the Monarch Butterfly campaign, Bike It!, and the Curbside Composting Pilot Program are just a few of the more recent initiatives that have been implemented and well-received by the community.

Building on its successes, the Commission embarked on a strategic planning process in order to identify opportunities to bring greater awareness to environmental matters within the Village. This process included identifying priorities that would align with the Village Board’s Strategic Plan and overall priorities for the Village. The Village Board approved a Resolution adopting the Environmental Commission’s plan at the August 15, 2016 meeting (*Attachment #1 & #2*).

Issues

Chairman Adam Kreuzer and members of the Environmental Commission have developed a line-item budget request that is tied to various initiatives that it would like to implement in the coming year (*Attachment #3*). In so doing, the Commission is seeking to repurpose 2016 budget funding through the elimination of two programs: 1) Recycling Extravaganza (\$500.00) and 2) Rain-Barrel Cost Sharing Program (\$500.00).

- 1) **Recycling Extravaganza and Electronics:** The County is currently working with various municipalities to develop a regionalized approach to electronics recycling that user-fee based and open to all DuPage County residents. The program is already up and running at two sites, Lisle and Wheaton, with a third site scheduled to open in the near future at the County’s satellite DOT facility in Woodridge. The Village incurred a unbudgeted cost of over \$6,000 this year to contract with an electronics recycling vendor for the community-wide Recycling Extravaganza. Given the significant change in the economics of the electronics recycling market, the Commission believes that the Village should sunset this program and transition to the County’s regionalized, user-pays approach.
- 2) **Rain Barrel Reimbursement Program:** The Commission recommends that the Village sunset this program as well. There has been declining participation over the last few years due to greater public awareness, the existence of similar programs sponsored through other governmental entities and non-profits, not to mention the availability of rain barrel products at national retail outlets. Consequently, the Commission would like to redirect the \$1,000 budget to incubate new initiatives in 2017.

2017 Funding Requests

Project/Initiative	Funding Request
Glen Ellyn Fund Initiative	\$8,500
One Earth Film Festival	\$3,500
Summer Art Installation	\$1,000
Conservation Foundation Partnership	\$1,000
Mural - Art Installation	\$2,000
Sustainable Gardens/Pollinator Planting and EC-Sponsored Educational Opportunities	\$1,500
Total	\$17,500

The Glen Ellyn Fund

The Commission is seeking to commence a new initiative that would provide private “margin of excellence” funds to support new and enhanced programs and projects in Glen Ellyn through a partnership with the DuPage Foundation to secure significant major gifts primarily through planned giving vehicles including estate gifts, IRA roll-overs, charitable remainder gifts, and other charitable instruments focusing on gifts from assets, as opposed to current earnings. The Glen Ellyn Fund approach was predicated on three objectives:

1. Raise significant major(+ \$25,000) and leadership (+\$100,000) gifts;
2. Minimize expenses by partnering with the DuPage Foundation and by focusing on one aspect of the funding universe...planned giving.
3. Avoid conflicts with most existing fundraising programs that help benefit Glen Ellyn, which are almost all focused on fund-raising events or annual fund campaigns...not planned giving.
 - ☐ **Funding Request:** \$8,500 total budget request to kick-off the initiative Glen Ellyn, broken out as follows:
 - ☐ \$6,500 for information/search mailer to Glen Ellyn households (ideally targeted to those headed by homeowners aged 55+)
 - ☐ \$2,000 to co-host small informational events with two separate audiences: prospective donors and those professionals offering estate planning services in the Glen Ellyn area

One Earth Film Festival

In April 2016, members of the Environmental Commission met with Anna Garcia Doyle, the Director of the One Earth Film Festival, to discuss bringing this annual festival to Glen Ellyn. Last year, the Festival welcomed 3,500 attendees from Chicagoland and beyond, and screened 33 films in over 43 screening events at 37 locations. We believe this to be a very worthwhile event to connect residents-young and old-together with new, award-winning films over the weekend of March 3-5, 2017. Pricing for film rental, necessary equipment, and publicity have been developed. The Lake Ellyn Boat House has been tentatively reserved for March 4 and 5 to host this two-day Film Festival.

Summer Art Installation

For the past few summers the Environment Commission has developed a summer public art project with a goal of making our downtown area a more interesting destination for shoppers as well as raising Environmental awareness. Previous projects included the painted/decorated bicycles and the large planter paintings this past summer.

Conservation Foundation Membership

Officially joining with a large number of municipalities as a member of the Conservation Foundation will allow us to access the educational resources of the Foundation to the benefit of the citizens of Glen Ellyn. The Environmental Committee intends to work with the Foundation to receive the maximum return on our investment in terms of goods and services delivered to the residents of Glen Ellyn.

Mural Project

In June 2015, the owner of the building at 449 North Main Street gave his tenant, Olive N' Vinnie's, permission to install a mural on the exterior north wall of the building. This wall has high visibility toward downtown Glen Ellyn, all Metra trains, pedestrians, vehicles, and those who travel the Prairie Path. Glen Ellyn resident and business owner Karen Evenson asked the Environmental Commission to assist with this project. In the 15 months since then, an established artist with Glen Ellyn roots has been chosen, a concept for the wall art has been developed, permission has been obtained from the building owner, and pricing to produce and install a surface-mounted, large-scale graphic of the art has been submitted.

Sustainable Gardens

Sustainable demonstration plantings may include pollinator friendly gardens, turf alternatives or storm-water management systems in publicly accessible planting areas. Educational opportunities include signage, public speakers, and associated literature.

Action Requested

The Environmental Commission is seeking Board authorization of its funding requests for inclusion in the Village's 2017 Budget. Chairman Kreuzer and members of the Environmental Commission will be in attendance at the workshop to discuss this funding request in greater detail with the Board.

Attachments:

1. August 15, 2016 Board Report re: Environmental Commission Strategic Alignment Plan
2. Board Approved Environmental Commission Strategic Plan
3. Environmental Commission 2017 Budget Request Submittal

ATTACHMENTS:

- Attachment 1_August 15 2016 Board Report re Environmental Strategic Alignment Plan (PDF)
- Attachment 2_Approved Environmental Strategic Alignment Plan (PDF)
- Attachment 3_Environmental Commission 2017 Budget Request (PDF)



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 08/15/16 07:00 PM
Department: Administration
Department Head: Al Stonitsch
Category: Resolution
Prepared By: Al Stonitsch

SCHEDULED

RESOLUTION 16-08

DOC ID: 2381

Resolution No. 16-08, A Resolution Approving and Adopting the Environmental Commission's 2016 Strategic Alignment Plan. (Assistant Village Manager Stonitsch)

Background

At the April 2016 Village Board Workshop, staff provided an initial briefing to the Village Board on the Environmental Commission's ("the Commission") proposed strategic alignment plan. The Commission embarked on this effort in order to identify environmental priorities for the Village that were aligned with those goals and objectives identified in the Village Board's strategic plan. The Board then formally considered the proposed plan at its June 27, 2016 meeting (***Attachment #1***). Following Board dialogue, the Board asked to continue the matter in order to allow for Trustees to further discuss any remaining concerns with the Chairman Kreuzer of the Environmental Commission.

Subject

A prior follow up meeting was convened between Trustee Ladesic, Trustee Senak, Chairman Kruezer, and staff to further address questions and concerns about the plan. There was mutual agreement from those present at the meeting to recommend to the Village Board several amendments to the Commission's initial proposal. The proposed changes are as follows, and are contained in the revised red-lined version document (***Attachment #2***):

Plan Section	Action Item	Proposed Change
I. Development	#3	Remove specific reference to 2012 International Energy Code, and refer to the aspiration goal of promoting energy efficient construction practices in the broader sense.
II. Business	n/a	n/a
III. Attractions	#7	Strike entirely; is more appropriately part of the Historic Preservation Commission's and/or Historical Society's charter
IV. Communication	#12	Adds new objective to include focusing efforts on promoting residential backyard composting.
V. Infrastructure	#7	Replace "continue" with "promote" to afford the Village the flexibility to continually evaluate the electrical aggregation program and the pricing impact of green energy (i.e. renewal energy credits-REC's) to Glen Ellyn residents.
VI. Financial Stability	#1	Remove full-time position reference, and replace with future consideration of a part-time internship program.
	#2	Add "Consider" joining Cool DuPage in order for the

		Board to have the opportunity to have further dialogue on the merits of this program at a future Board workshop.
--	--	--

Budget Impact

The Commission’s proposed plan identifies several new funding requests; however, those requests have been omitted from the plan for the time being, and will be deferred for further Board discussion as part of the 2017 Village Budget process.

Strategic Plan Initiative

This item relates to Village Board Strategic Issue:

- #V: INFRASTRUCTURE. Invest in infrastructure to meet key needs, including downtown access, Village facilities, storm water issues and technology improvement.
 - Action Step: Work with the Environmental Commission to develop sustainability goals for the Village by August 2016.

Recommendation and Action Requested

The Environmental Commission is requesting Village Board approval of a Resolution to adopt the Commission’s proposed (amended) 2016 Strategic Alignment Plan.

Resolution No. _____

**A Resolution Approving and Adopting the
Environmental Commission's 2016 Strategic Alignment Plan**

WHEREAS, the Village of Glen Ellyn ("the Village") is a home rule municipality in accordance with the Constitution of the State of Illinois 1970;

WHEREAS, the Village Board identified the development of a Environmental Sustainability Plan as one of its priorities in its 2016 Strategic Plan for the Village;

WHEREAS, the Environmental Commission developed a draft plan in response to the Village Board's strategic goal;

WHEREAS, the corporate authorities have reviewed and discussed the Environmental Commission's proposed Strategic Alignment Plan ("the Plan");

WHEREAS, the Plan contains several new funding requests that the Village Board will review and consider as part of the Village's regular annual budget development process; and

WHEREAS, the Village Board has determined that it is in the public interest to formally adopt the Plan, as recommended unanimously by the Environmental Commission.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF GLEN ELLYN, DUPAGE COUNTY, ILLINOIS, in exercise of its home rule powers, as follows:

That the Village President and Village Clerk are hereby authorized and directed to formally approve and adopt by Resolution the Environmental Commission's 2016 Strategic Alignment Plan.

PASSED by the Village President and Board of Trustees of the Village of Glen Ellyn, Illinois, this 15th day of August, 2016.

AYES:

NAYS:

ABSENT:

Resolution 16-08

Meeting of August 15, 2016

APPROVED by the Village President of the Village of Glen Ellyn, Illinois, this
_____ day of _____, 2016.

Village President

Attest:

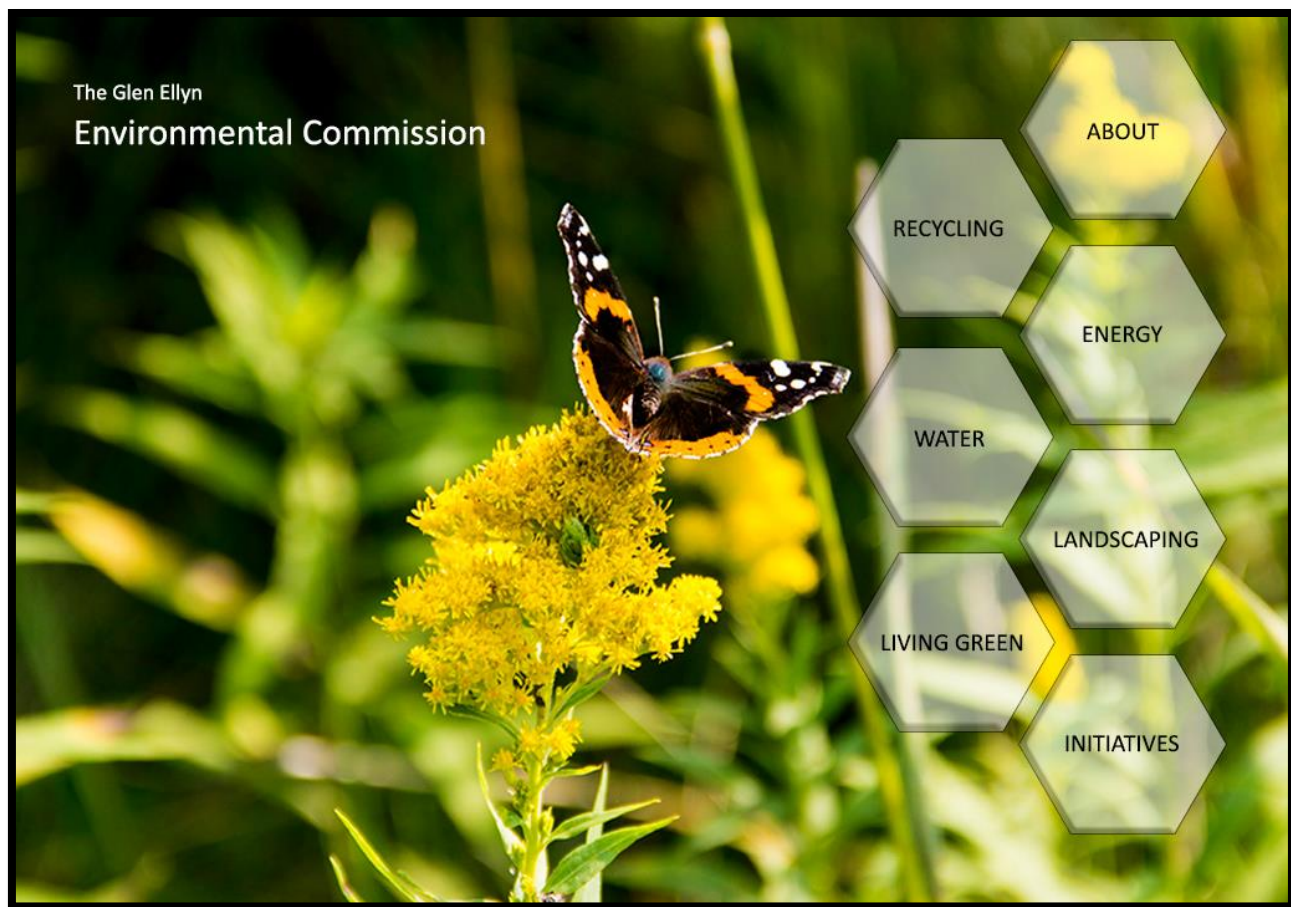
Village Clerk

ATTACHMENTS:

- ATT #1 - Board Report, June 2016 re Environmental Commission Strategic Plan (PDF)
- ATT #2 - Revised EC Strategic Alignment Plan (w/ red line edits) (PDF)

GLEN ELLYN ENVIRONMENTAL COMMISSION

Strategic Alignment Plan



August 15, 2016

Strategic Alignment

Recently, the Village of Glen Ellyn generated its 2014-2017 Vision and Strategies Plan (September 2013). The Glen Ellyn Environmental Commission (EC) would like to build on the Vision and Strategies Plan and align the work of the Commission with these efforts as well as examine additional opportunities for the future.



The Commission works with Village staff and Village residents and businesses on environmental issues and opportunities, as well as encourages conservation practices through hands-on activities within the community. As it relates to Village practices, the Commission reviews Village ordinances and contracts when they have an environmental impact, in order to suggest areas of improvement. In order to better serve the Village, the residents and businesses, and the environment, the Commission asked Northern Illinois University's (NIU) Center for Governmental Studies (CGS) to design a strategic alignment session focused on establishing a vision, mission, and goals/strategies for the EC that will support the Village's most recent plan. The outcome is a proposed action plan based on a vision and mission for the Glen Ellyn Environmental Commission.

Strategic Alignment

- The process of bringing the actions of an organization's divisions and staff members into line with the organization's planned objectives.
- Ability of an organization to achieve strategic goals benefit from performing a comprehensive strategic alignment assuring all divisions are jointly working towards the stated goals.



NORTHERN ILLINOIS UNIVERSITY

Center for
Governmental Studies

Outreach, Engagement, and Regional Development

Survey of Environmental Commission Members

To make the most of the alignment session, a pre-session survey was sent out to all members of the EC to gather input on the current vision, mission, and Village goal alignment possibilities. All EC members participated. The survey results were then used in the first planning session as a starting point for discussions. The first session was held on February 18, 2016 with a second follow-up session held on February 24, 2016 to finalize the vision, mission, and goal alignment strategies. The information presented next is the result of the two planning sessions.

Strategic Alignment Planning Sessions

At the first session on February 18, 2016, after introductions, the attendees moved on to discussing and reaching consensus on the best mission and vision for the EC. The facilitator discussed first what components a vision needs in order to be strong and meaningful.

Vision

- **Defines the optimal desired future state - the mental picture - of what an organization wants to achieve over time;**
- **Provides guidance and inspiration as to what an organization is focused on achieving in five + years.**
- **Is written succinctly in an inspirational manner that makes it easy for all employees to repeat.**

The facilitator then shared a draft vision statement based on input from the survey. After discussion at both sessions, the vision was modified and agreed upon by the EC.

Glen Ellyn Environmental Commission Vision

Glen Ellyn is an environmentally and culturally rich village that is regarded as one of America's best places to live, work, learn and play through its commitment to sustainable practices in all aspects of community development.



After the vision was discussed, the EC focused on writing a mission statement. Again, the facilitator discussed what a mission statement should include.

Mission

- **Defines the present state or purpose of an organization;**
- **Answers three questions about why an organization exists -**
 - **WHAT it does; WHO it does it for; and HOW it does what it does.**
- **Is written succinctly in the form of a sentence or two, but for a shorter timeframe (1-3 years).**

The facilitator then shared a draft mission statement based on input from the survey. After discussion at both sessions, the mission was modified and agreed upon by the EC.

Glen Ellyn Environmental Commission Mission

The Glen Ellyn Environmental Commission supports the stewardship of Village resources through development of environmentally responsible initiatives that promote a healthy and informed community.

Inform.

Enhance.

Conserve.

With both an agreed upon vision and mission, the EC was able to focus on how to align its current focus areas, as well as future initiatives with the Village's Strategic Plan.

Four Focus Areas

Currently, the EC focuses its efforts in four main areas:

1. Arts & Outreach,
2. Transportation, Health & Wellbeing,
3. Recycling, and
4. Sustainable Landscaping

The survey revealed that each of the areas were about equally valued by Commission members. Ultimately, the EC decided that these four focus areas were of the greatest need, and exhibited the most potential, for the Village. With the four focus areas in mind, the EC worked within the five strategic areas identified by the Village and created strategic goals with action items that were in alignment. Next is the proposed alignment plan.



NORTHERN ILLINOIS UNIVERSITY

**Center for
Governmental Studies**

Outreach, Engagement, and Regional Development

ENVIRONMENTAL COMMISSION STRATEGIC ALIGNMENT PLAN

I: Development

Strategic Goal: With any real estate development activity, the environmental commission will evaluate the environmental impact and how to best conserve and enhance our environment.

Action Items:

1. Establish an Environmental Commission liaison appointment to the Plan Commission and/or Capital Improvements Commission
2. Promote any level of LEED Certification
3. Continue to Promote energy efficient construction methods and practices in residential, commercial, and public buildings
4. Promote sustainable and native landscape plans and practices
5. Promote better, long-term storm water management practices
6. Enable commercial recycling
7. Encourage bicycle-friendly infrastructure
8. Encourage green spaces and improved Tree Preservation

II: Business

Strategic Goal: Strengthen our local business environment.

Action Items:

1. Promote better business use of our public sidewalks
2. Promote more creative and relevant downtown events
 - a. Encourage Chamber of Commerce and Downtown Alliance to consult with Environmental Commission on CBD events
 - b. Taste of Glen Ellyn-Explore ways to encourage Chamber of Commerce to include and promote local restaurants in the event
 - c. Expand music events to include College of DuPage (WDCB) and local entertainment
 - d. Enhance use of Glen Art Theater, including establishing film festivals
3. Enable a commercial recycling program
4. Develop Environmental Sustainability Award to recognize local businesses and property owners
5. Explore creative opportunities to leverage the potential economic benefits of the Prairie Path, including a Divvy Bike Pilot Program, via a partnership with other communities along the path
6. Continue with “Dark Windows” initiatives

III: Attractions

Strategic Goal: Create, enhance and promote amenities that make Glen Ellyn a great place to live, work and visit.

Action Items:

1. Continue to emphasize the importance of aesthetic and diverse plant species throughout the Village
2. Establish a Sustainable Gardens Award Initiative
3. Promote sidewalk cafes
4. Promote pocket parks, gardens, and special event plazas, including pocket band shell
5. Develop enhanced Prairie Path and Central Business District pathway connectivity through improved way-finding signage and/or infrastructure enhancements
6. Promote “Arts & Outreach”, including permanent and seasonal art installations and special events

IV: Communication

Strategic Goal: Promote the awareness of environmental issues that affect the well-being of Glen Ellyn and its residents.

Action Items:

1. Establish a clear process for regular communication between Village Board and Environmental Commission
2. Establish semi-annual meetings, chaired by Village President, with Chairs of all Village Commissions and the Village Manager
3. Establish liaison appointments of Environmental Commissioners to the Plan Commission and Capital Improvements Commission
4. Establish an active volunteer registry of those Village residents interested in assisting with, contributing to, or participating in Environmental Commission’s initiatives and programs
5. Develop a “State of the Glen Ellyn Environment” Annual Report to the Village Board and/or Village that reports on accomplishments and on-going initiatives
6. Continue to explore ways to improve the Environmental Commission’s webpage & Village’s webpages, social media, and newsletters as a means to better convey environmental initiatives, concerns, etc.
7. Continue to publish Spring “Environmental” Newsletter
8. Enhance communication with developers, real estate agents, and other private entities on environmental sustainability best practices

9. Continue to develop Environmental Commission sponsored seasonal posters in CBD Big Belly containers
10. Continue to invest in the Village's residential rain barrel reimbursement program
11. Continue to sponsor the Village's annual Recycling Extravaganza Event
12. Continue to promote residential "backyard" composting within the community.

V: Infrastructure

Strategic Goal: Promote and develop environmentally friendly infrastructure.

Action Items:

1. Work with Village to develop an environmental sustainability plan and goals
2. Construct bicycle-friendly transportation infrastructure, including connection from Great Western Trail to Prairie Path
3. Encourage sustainable landscaping practices, including native or perennial plantings for all public landscaping and streetscape projects
4. Improve our public and private storm water management
5. Preserve, improve, and create open spaces, including pocket parks and plazas.
6. Improve Prairie Path Park and continue to restore Prairie Path
7. Promote 100% green energy (i.e. Renewable Energy Credits) with municipal aggregation program
8. Explore opportunities to expand use of Big Belly refuse/recycling containers in CBD
9. Implement Residential Curbside Composting Pilot Program
10. Develop an environmentally friendly parking structure in the CBD, including:
 - a. Facilities to capture rainwater
 - b. Roof top park/green space
 - c. Pleasant pedestrian experience

VI: Financial Sustainability

Strategic Goal: Evaluate how environmental initiatives can save money and generally improve our economic environment over the short and long terms.

Action Items:

1. Consider retaining an environmental sustainability intern who could assist the Village in addressing its environmental sustainability goals
2. Consider joining Cool DuPage
3. Identify federal/state/private grants and funding opportunities
4. Incentivize building and infrastructure sustainability initiatives
5. Promote business and residential sustainability initiatives
6. Develop and implement a fund-raising partnership with the DuPage Foundation

Environmental Commission Budget Proposal

Overview

In 2016 the Environmental Commission (EC) undertook a professionally facilitated exercise to ensure that the projects and programs we are recommending in our 2017 budget are aligned with the strategic plan approved by the Village Trustees. This budget represents the intersection of the Village's strategic plan and the Environmental Commission's alignment to that strategic vision.

First, FY2017 we recommend sun-setting two projects developed as initiatives under the direction of the Environmental Commission.

Second, we are recommending appropriate funding levels for several new and continuing projects. While all deserve support on their own merit, a number are also connected to the Glen Ellyn Fund initiative as they provide prospective donors with tangible "proof of concept" as pilot projects that could be greatly expanded and enhanced through significant private gifts.

Finally, we have a new initiative that has been nurtured under Environmental Commission leadership to take pro-active steps to encourage significant private gifts to help provide the "margin of excellence" to new and existing village programs and projects.

This initiative, The Glen Ellyn Fund, which includes a partnership with the DuPage Foundation for major gift fundraising in support of Glen Ellyn is the cornerstone of our 2017 budget request.

- I. **Sunset two programs** originally incubated through Environmental Commission leadership
- A. Recycling extravaganza
- 2016 EC budget line = \$1,000
 - Actual cost to village = \$7,000
 - Recommendation: There are a number of recycling alternatives now available and in use by other communities in DuPage County. The EC is conducting a thorough review of these alternatives and will forward a recommendation shortly to Village staff.
- B. Rain-Barrel Cost Sharing
- 2016 EC Budget line = \$1,000
 - Actual cost = \$200
 - Recommendation: Applications for cost-sharing have been declining as the supply of rain barrels has grown through availability at local stores as well as online and the cost has decreased. We recommend elimination of the village cost-share program while continuing to advise residents of the advantages of rain barrels in storm-water management.

II. **New and continuing Commission initiatives**, many providing “proof of concept” examples to prospective donors to the Glen Ellyn Fund. (Project descriptions are attached as appendices A - E.)

A. Mural Project	\$2,000*
B. One Earth Film Festival	\$3,500*
C. Conservation Foundation Partnership	\$1,000
D. Summer Art Installation	\$1,000*
E. Sustainable/Pollinator Planting and EC-Sponsored educational opportunities	\$1,500*

* Indicates pilot projects that may be of interest to private donors

III. The Glen Ellyn Fund

- A. The purpose: To provide private “margin of excellence” funds to support new and enhanced programs and projects in Glen Ellyn through a partnership with the DuPage Foundation to secure significant major gifts primarily through planned giving vehicles including estate gifts, IRA roll-overs, charitable remainder gifts, and other charitable instruments focusing on gifts from assets, as opposed to current earnings.
- B. The Glen Ellyn Fund approach was predicated on three objectives:
1. Raise significant major(+ \$25,000) and leadership (+\$100,000) gifts;
 2. Minimize expenses by partnering with the DuPage Foundation and by focusing on one aspect of the funding universe...planned giving.
 3. Avoid conflicts with most existing fundraising programs that help benefit Glen Ellyn, which are almost all focused on fund-raising events or annual fund campaigns...not planned giving.
- C. \$8,500 budget request for 2017 to kick-off Glen Ellyn Fund
- \$6,500 for information/search mailer to Glen Ellyn households (ideally targeted to those headed by homeowners aged 55+)
 - \$2,000 to co-host small informational events with two separate audiences: prospective donors and those professionals offering estate planning services in the Glen Ellyn area

IV. Total 2017 budget request = \$17,500

This is compared to the actual cost of EC activities of \$XX,XXX (AL WILL PROVIDE) in 2016.

Appendix A: Mural Project

In June 2015, the owner of the building at 449 North Main Street gave his tenant, Olive N' Vinnie's, permission to install a mural on the exterior north wall of the building. This wall has high visibility toward downtown Glen Ellyn, all Metra trains, pedestrians, vehicles, and those who travel the Prairie Path. Glen Ellyn resident and business owner Karen Evenson asked the Environmental Commission to assist with this project. In the 15 months since then, an established artist with Glen Ellyn roots has been chosen, a concept for the wall art has been developed, permission has been obtained from the building owner, and pricing to produce and install a surface-mounted, large-scale graphic of the art has been submitted.

Appendix B: One Earth Film Festival

In April 2016, members of the Environmental Commission met with Anna Garcia Doyle, the Director of the One Earth Film Festival, to discuss bringing this annual festival to Glen Ellyn. Last year, the Festival welcomed 3,500 attendees from Chicagoland and beyond, and screened 33 films in over 43 screening events at 37 locations. We believing this to be a very worthwhile event to connect residents—young and old--together with new, award-winning films over the weekend of March 3–5, 2017. Pricing for film rental, necessary equipment, and publicity have been developed. The Lake Ellyn Boat House has been reserved for March 4 and 5 to host this two-day Film Festival.

Appendix C: Conservation Foundation Membership

Officially joining with a large number of municipalities as a member of the Conservation Foundation will allow us to access the educational resources of the Foundation to the benefit of the citizens of Glen Ellyn. The Environmental Committee intends to work with the Foundation to receive the maximum return on our investment in terms of goods and services delivered to the citizens of Glen Ellyn.

Appendix D: Summer Art Installation

For the past few summers the Environment Commission has developed a summer public art project with a goal of making our downtown area a more interesting destination for shoppers as well as raising Environmental awareness. Previous projects included the painted/decorated bicycles and the large planter paintings this past summer.

Appendix E: Sustainable Gardens

Sustainable demonstration plantings may include pollinator friendly gardens, turf alternatives or storm-water management systems in publicly accessible planting vignettes. Educational opportunities include signage, public speakers, and associated literature.