# 2017 BUILDING ENERGY BENCHMARKING REPORT



Cook County Government



Based on 2016 Calendar Year Data

## **ACKNOWLEDGMENTS**

Gathering the information necessary to complete this report involved the contributions of time and expertise by many people. Special thanks to the following contributors for data collection, analysis, and review of the energy and water benchmarking results.

#### **Bureau of Asset Management:**

	Ann P. Kalayil	Bureau Chief
	Jamie Meyers	Energy Manager
Depar	tment of Capital Plannin	ng and Policy
	Earl Manning	Director
	Christine Johnson	Assistant Director
	Kate Buczek	Energy Consultant
Depar	tment of Facilities Mand	ıgement
	Bob Rassano	Electrical Foreman
	Pat Nolan	Operating Engineer IV
<u>Bureau of Adn</u>	ninistration:	
	Jerry Pray	Industrial Engineer IV
Depar	tment of Environmental	Control
	Deborah Stone	Director
	Laura Oakleaf	Legislative Coordinator I
<u>Bureau of Find</u>	ince:	

#### Performance Management Office

Sam Molaro Industrial Engineer I

## TABLE OF CONTENTS

### Table of Contents

ACKNOWLEDGMENTS	1
ENERGY BENCHMARKING AT A GLANCE	3
BENCHMARKING METRICS	4
OVERALL ENERGY PERFORMANCE	5
ENERGY STAR RESULTS	6
Building Portfolio Overview	7
ENERGY PERFORMANCE RESULTS	8
GREENHOUSE GAS EMISSIONS PERFORMANCE RESULTS	11
FUTURE ENERGY SAVINGS	15
ENERGY SOURCE DIVERSIFICATION	16
WATER USAGE	18
Next Steps	23
Appendix A: 2016 Energy Benchmarking Results of County-Owned Properties	24
APPENDIX B: COOK COUNTY BUILDING LIST BY PORTFOLIO	28
APPENDIX C: PERFORMANCE METRICS – SITE VS. SOURCE ENERGY	35
APPENDIX D: 2016 WATER BENCHMARKING RESULTS	

### **ENERGY BENCHMARKING AT A GLANCE**

"I BELIEVE THAT COOK COUNTY SHOULD BE A WORLD-CLASS MODEL OF SUSTAINABILITY. THE PASSAGE AND IMPLEMENTATION OF THE BENCHMARKING ORDINANCE IS A MAJOR STEP TOWARD REALIZING OUR GOAL."

#### PRESIDENT TONI PRECKWINKLE



**Cook County Energy Benchmarking Highlights** 

### **BENCHMARKING METRICS**

In 2014, the Cook County Board of Commissioners passed the first ever energy benchmarking ordinance to compare County-owned buildings' energy and water usage on an annual basis.

- The Benchmarking Ordinance requires the County to track annual energy and water use of its buildings larger than 35,000 square feet, which is 98% of the County portfolio.
- The Benchmarking Ordinance identifies the U.S. Environmental Protection Agency (EPA) Portfolio Manager as the required method of benchmarking.
- Portfolio Manager is a secure online tool that tracks and measures energy and water consumption as well as greenhouse gas emissions for one building or multiple buildings in a portfolio.
- The main metrics of analysis are energy use intensity (EUI) which details source energy per square foot, and GHG intensity which details CO<sub>2</sub> equivalent emissions per square foot.
- This report covers energy and water usage during the 2016 calendar year for all County-owned buildings over 35,000 square feet.
- Some facilities less than 35,000 square feet with sufficient data sets have been included to better understand the County's portfolio energy and water usage.

In an effort to ensure accuracy in benchmarking figures, the Bureau of Asset Management improved all of the County's Portfolio Manager Accounts in 2014 by:

- reconciling utility meters and buildings, upgrading energy management systems,
- installing sub-meters,
- separating space types for mixed-use buildings
- verifying number of building occupants, and
- number of computers.

Continued efforts are made each year to ensure the accuracy of the portfolio. By better understanding the occupancy and use of a facility, building performance ratings are more precise. Refer to Appendix C for explanation of this report's choice to analyze buildings based on source energy use.



### **OVERALL ENERGY PERFORMANCE**

The Energy Star rating system assigns each building a score 1–100 (with 50 being the median) by comparing it to similar structures nationwide in 18 different building type categories. The scores are normalized for size, weather and building usage. Higher scores reflect better performing buildings. To be eligible for Energy Star certification, a building must earn an Energy Star score of 75 or higher, indicating that it performs better than at least 75 percent of similar buildings nationwide.



#### 2016 Building Energy Performance Highlights

- Year over year energy consumption dropped by nearly 20,000,000 kBtu
- Year over year greenhouse gas emissions were reduced by over 15,000 metric tons
- Over **55%** of buildings eligible for an Energy Star score performed equal to or better than the national median.
- 57% of eligible Energy Star properties maintained or improved their scores over the previous year
- The George Dunne Administration building, Skokie Courthouse, Rolling Meadows Courthouse, and Rockwell Warehouse scored high enough to be eligible for Energy Star certification.

#### **BUILDING SPOTLIGHT**

#### **ENERGY STAR SCORE OF 91!**



THE 37-STORY GEORGE W. DUNNE ADMINISTRATION BUILDING HAS BEEN AWARDED AN ENERGY STAR SCORE OF **91** FOR OPERATING EFFICIENCY AND HAS BEEN ENERGY STAR CERTIFIED EVERY YEAR SINCE 2008. THIS YEAR, THE GEORGE W. DUNNE ADMINISTRATION BUILDING ACHIEVED A **LEED GOLD CERTIFICATION** IN THE EXISTING BUILDINGS- OPERATIONS AND MAINTENANCE CATEGORY. THE ENERGY CONSERVATION MEASURES FROM THE GEPC PACKAGE 1 HELPED TO ACHIEVE THIS CERTIFICATION LEVEL. THESE ENERGY CONSERVATION MEASURES INCLUDE CONTROLS INTEGRATION, END DEVICE REPAIR, LIGHTING UPGRADES, PLUMBING SYSTEM UPGRADES, STEAM SYSTEM INSULATION, DEMAND CONTROLLED VENTILATION, AND PARTICIPATION IN A DEMAND RESPONSE PROGRAM.

### **ENERGY STAR RESULTS**

Table 1: Energy Star	Scores for Cook	County Governm	ent Buildings

		-		
Facility	Energy Star Score 2013	Energy Star Score 2014	Energy Star Score 2015	Energy Star Score 2016
George W. Dunne Administration Building	87	89	91	91
Skokie Courthouse (2 <sup>nd</sup> District)*	49	79	84	86
Rolling Meadows Courthouse (3 <sup>rd</sup> District)*	66	71	69	80
Rockwell Warehouse*	72	74	75	75
Domestic Violence Courthouse	70	66	72	65
Whitcomb Building	Not Available	52	59	59
Cicero Records Center	Not Available	63	56	58
Cook County Building	41	53	52	55
Jefferson Building	Not Available	38	49	52
Bridgeview Courthouse (5 <sup>th</sup> District)	57	45	42	52
Markham Courthouse (6 <sup>th</sup> District)	52	48	54	51
Maywood Courthouse (4 <sup>th</sup> District)	Not Available	31	44	44
Piszcezek TB Clinic	19	23	24	39
Hawthorne Warehouse	45	43	39	37
Logan Square Health Center	60	66	38	34
John Stroger Jr. Hospital Campus	21	18	20	17
Robbins Health Center	52	55	47	13
Cottage Grove Health Center	17	19	23	6
Provident Hospital	16	3	1	4
Rothstein Core Center	1	1	1	1
Englewood Health Center	1	1	1	1

\*Scores high enough for attempting to pursue certification in 2017

Table 2: Cook County Government Buildings Not Eligible for Energy Star Scores

Facility	Reason Not Eligible
Department of Corrections Campus	Multiple buildings, Non-eligible property type
Oak Forest Campus	Multiple buildings on account
Juvenile Center Campus	Multiple buildings on account, Non-eligible property type
Institute of Forensic Medicine	Non-eligible property type

Note: Based on the way the buildings are metered, 170 buildings are included in this report for evaluation (see Appendix A for exact counts for each facility in the portfolio), while the 21 facilities in Table 1 are eligible for an Energy Star Score.

### **BUILDING PORTFOLIO OVERVIEW**



2016 benchmarking analyzed 170 buildings categorized into four main types of portfolios: Public Safety, Corporate, Health and Hospitals, and Parking. These buildings represent 98.5% (16.9M square feet) of the total square footage within Cook County Government buildings. The Health and Hospitals and Public Safety Portfolios have the largest energy consumption. The Health and Hospitals portfolio demands 40% of the energy (refer to Figure 2) yet makes up only 21% of the square footage (refer to Figure 1). The Public Safety portfolio includes 18 more buildings and 7 million more square feet than the Health and Hospitals portfolio. While representing 56% of the total square footage, it represents 50% of source energy use.

Figure 2: 2016 Source Energy Use by Portfolio





### **ENERGY PERFORMANCE RESULTS**

The diagram below<sup>1</sup> explains the inputs that determine EUI. EUI measures a building's energy use by factoring in its gross floor area; therefore, the EUI expresses a building's energy consumption as a function of its size. This report analyzes Source EUI because source energy provides a holistic measure of energy use based on the combination of primary and secondary energy types, as described within Appendix C. Source EUI also forms the basis for the Energy Star score.

#### HOW IS ENERGY USE INTENSITY (EUI) CALCULATED?



The 170 buildings benchmarked used around 1.98 billion kBtus of energy in 2016 and emitted 204,836 metric tons of CO2 equivalent emissions. **Figure 3** exemplifies the varied relationship between a building's total energy use and its Source Energy Use Intensity (EUI). A higher Source EUI does not always correspond to higher total energy consumption, as exemplified by Provident Hospital. Additionally, **Figure 3** illustrates that a lower total energy use does not always have a lower Source EUI. However, a low EUI generally suggests more efficient energy performance.



#### Figure 3: 2016 Total Energy Use and Source EUI by Facility

<sup>1</sup> EUI Graphic created with icons from flaticon.com and information from the American Institute of Architects

The national median EUI is a recommended benchmarking metric for all buildings and is leveraged to assess opportunities for improvements. **Figure 4** compares the EUI of County buildings to the national median.

- The majority of Cook County's building portfolio has seen a consistent decline in EUI since 2014
- 2016 has shown the lowest energy use intensity values yet in the portfolio.
- The CORE Center used more than 5 times as much energy per square foot as the median.

These improvements are attributed to the energy efficiency capital improvement projects and efficient operations practices.



Figure 4: 2016 Source EUI by Facility vs. the National Median Source EUI for Similar Facilities

**Figure 5** provides an illustration of the relationship between source energy use, Source EUI, and the utility cost for 15 Cook County facilities. The largest energy users such as the Department of Corrections and Stroger Hospital were excluded from **Figure 5** to fully demonstrate the interaction between source energy and utility cost. The high Source EUI for the Forensic Institute, given its low source energy use and low utility cost, reveals the impact of the gross building area input within the EUI calculation.



Figure 5: Source Energy Use, Energy Use Intensity, and Utility Cost by Facility

### **GREENHOUSE GAS EMISSIONS PERFORMANCE RESULTS**

Greenhouse gas emissions occur when carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) gases are released into the atmosphere due to energy consumption at the property. Emissions are expressed in carbon dioxide equivalent emissions (CO2e), a universal unit of measure that combines the quantity and global warming potential of each greenhouse gas. Cook County Government adopted a goal to reduce 80% of GHG emissions from facilities and operations by 2050 from a 2010 baseline, a 2% annual reduction.

- The benchmarked buildings in 2016 emitted 204,836 metric tons of CO2
- For benchmarked facilities, the County has decreased emissions by 15,620 metric tons in 2016
- The emission goal for 2016 was 12% since 2010 actual reduction since 2010 is 25%

Figure 6: Benchmarked GHG Intensity Summary Compared with 2050 Targets



#### Figure 7: 2016 Total GHG Emissions by Portfolio

**Figure7** breaks GHG Emissions down by portfolio and is consistant with Source Energy Use within each of the building portfolios, with approximately 9% of use and emissions in the Corporate portfolio, 40% in the Health and Hospitals portfolio, 50% in the Public Safety portfolio, and 1% in the Parking portfolio. **Figure 8** below further breaks down greenhouse gas emissions by building.



#### Figure 8: 2016 Greenhouse Gas Emissions (Metric Tons CO2e) by Facility



Figure 9 compares the County buildings to national medians for greenhouse gas emissions.

- The Dunne Building continues to significantly outperform the national median.
- Although emissions are consistently trending down across the portfolio, there is still significant progress to be made on the two largest campuses, the Department of Corrections and Stroger Hospital.







#### **SUSTAINABILITY SPOTLIGHT:**



#### SOLAR TREES BRIDGEVIEW COURTHOUSE (5<sup>TH</sup> DISTRICT)

BRIDGEVIEW COURTHOUSE HAS INSTALLED 12 SOLAR TREES IN THE PARKING LOT IN ADDITION TO THE OTHER ENERGY CONSERVATION MEASURES INCLUDING MECHANICAL EQUIPMENT UPGRADES AND NEW CONTROL SYSTEMS. THE 12 SOLAR TREES HAVE THE COMBINED POWER TO SAVE A TOTAL OF 242,259 KWH PER YEAR. ALL ENERGY CONSERVATION MEASURES AT BRIDGEVIEW ARE ESTIMATED IN TOTAL TO REDUCE GHG EMISSIONS BY 2,835 METRIC TONS OF CO<sub>2</sub> ANNUALLY. Greenhouse gas emissions intensity expresses total emissions on a per square foot basis. **Figure 10** shows the overall emissions intensity comparison over the past three years of benchmarking, and highlights a general decrease in emissions intensity across the majority of facilities. The CORE Center, as an outlier, releases more than double the amount of kgCO2e/ ft<sup>2</sup> as compared to the rest of the portfolio, and is a target for improvements/further analysis of the design impacts on energy usage.



Figure 10: 2014- 2016 Greenhouse Gas Emissions Intensity (kgCO2e/ft<sup>2</sup>) Comparison

### **FUTURE ENERGY SAVINGS**

Through the Energy Efficiency Capital Improvement Program, Cook County has implemented over \$44 million in building improvement projects to make large-scale energy efficiency upgrades at 11 County facilities. These improvements were part of Guaranteed Energy Performance Contracts (GEPCs) that provide expertise and support for energy projects. Upgrades are paid for through the savings generated over 20 years. These GEPC's will reduce greenhouse gas emissions, improve occupant comfort, and upgrade lighting infrastructure, aging mechanical systems, and temperature controls.

Cook County's latest Guaranteed Energy Performance Contract (GEPC) projects are in the final stages of installation for Bridgeview, Skokie, Markham, and Rolling Meadows courthouses, as well as five district highway maintenance facility campuses. The contract including the Cook County Building and Dunne Building closed out in 2017. These GEPC's will then enter the measurement and verification stages for the next 20 years to guarantee energy and emissions savings. The courthouses are projected to reduce energy consumption by 53%, the corporate buildings by 30%, and highway facilities by over 40%.



The previous two large GEPC's targeting the Health and Hospitals system and the Department of Corrections and Juvenile Detention Center were completed in 2012 and 2014, respectively, and have entered their 20 year savings period.

For further information on the County's energy initiatives, visit https://www.cookcountyil.gov/content/energy-initiatives or https://www.cookcountyil.gov/sustainability.

### **ENERGY SOURCE DIVERSIFICATION**

The diversity of energy resources comprising the electricity grid further influences greenhouse gas emissions potential. When source energy usage is the unit of measure, a cleaner grid divesting away from emissions-intensive fossil fuels and realizing a greater proportion of renewable energy resources can further lower carbon emissions across the building portfolio. Lower emissions at the grid level help to reduce overall greenhouse gas emissions on the environment and to accelerate emissions reduction goals across the building portfolio. Nuclear power, coal-fired power, and natural gas-fired power comprised the majority of energy supplied to Cook County, as represented within **Figure 12**. This year, the slight decline of coal usage to the second largest grid component behind nuclear could indicate a potential decline in fossil fuel energy usage across the ComEd energy mix that supplies Cook County facilities.



Figure 12: Sources of Electricity Supplied For 2016

Source: Commonwealth Edison Company's Environmental Disclosure Statement Ending 12/2016

The County heavily relies on natural gas to fuel buildings, as shown in **Figure 13** below. For example, the Department of Corrections relies on natural gas to provide over 71% of its energy consumption. As part of the energy efficiency ESPC projects, four of the County's courthouses (Bridgeview, Markham, Rolling Meadows, and Skokie) shifted from an all-electric generation toward diversifying with natural gas mechanical equipment that became active during the 4<sup>th</sup> quarter of 2016. Skokie Courthouse also incorporated a geothermal ground source heat pump to provide the majority of its power.





### WATER USAGE

2016 marks the first year with a full 12 months of consecutive water data to report on. Note that the Health and Hospitals portfolio includes some estimated values based on available data which will be researched further in future reporting years. Benchmarking water usage across the portfolio will provide insight into which facilities could benefit most from water conservation projects and how to be most economical with this finite resource. As of 2016, the water baseline was about **630,553.33 thousand gallons (Tgal) or about 630,553,330 gallons.** Part of the Guaranteed Energy Performance Contracts that Cook County has utilized for energy conservation also included water savings. Large capital improvement projects are also targeted for the Department of Corrections Campus over the next few years, as the DOC makes up the largest portion of water consumption. **Figure 14** shows the percentage of water usage by facility type.

Figure 14. Total Water Usage by Facility Type



# What is the Energy-Water Nexus?

Energy uses a significant amount of water. According to the 2016 IEA World Energy Outlook, 10% of global water consumption comes from the energy sector.<sup>2</sup> Thermoelectric power plants (generating electricity with natural gas, coal, nuclear, and oil) require water for cooling, and extraction of fossil fuel resources through hydraulic fracturing and other methods use high pressurized water. Because of this relationship, reducing energy consumption reduces water usage, and reducing water consumption reduces energy usage for treatment and distribution. Understanding these impacts goes beyond utility bills to realize the true impacts that operations have by implementing energy efficiency and water conservation projects.

<sup>&</sup>lt;sup>2</sup> Water-Energy Nexus. IEA. Excerpt from World Energy Outlook 2016.

**Figure 15** shows the annual water usage in thousand gallons (TGal) by facility and provides a snapshot of some of the highest water consumption locations. The DOC Campus was excluded from this chart as its usage is exponentially higher than the other facilities in the portfolio and makes up over 74% of all water usage at the County. All water intensity and annual usage estimates can be found in Appendix D.



Figure 15. 2016 Comparison of Water Usage and Water Usage Intensity

19 | Page







Figure 17. Water Usage in Remaining 2% of Facilities (from Figure 16)





### **NEXT STEPS**

Benchmarking allows facility managers and occupants to better understand their building's energy performance and the impact of capital and operational changes. In an effort to make sure benchmarking figures are as accurate as possible, the Bureau of Asset Management is currently working to:

- Implement a new energy management system to make improvements between utility meters and buildings
- Continue with the sub-metering of building groups previously benchmarked as one structure, such as separating the courthouse (CCB) and the administration building (CCAB) from the Department of Corrections (DOC) campus account to better analyze individual building performance and more accurately represent the DOC complex
- Continue prioritizing sustainability initiatives within low-performing portfolios. For instance, none of the Health and Hospitals buildings had an Energy Star score above the national median, and the buildings consume 40% of the County's source energy usage
- Finalize water data collection policy for future reporting and analysis and complete water meter inventory
- Begin water conservation planning for Department of Corrections Campus

Beyond benchmarking, the County is undertaking the following sustainability projects that will improve building operations and reduce energy consumption:

- Utilizing the developed Carbon Reduction Plan to identify strategies to reduce building consumption and inform project investments that effectively reduce GHG emissions
- Conducting Energy Assessments to improve energy efficiency projects and highlight improvements
- Participating in a Demand Response Load Curtailment Program that was expanded to include more hours at select properties
- > Designing a new LEED certified facility as a redevelopment project at Stroger Hospital
- > Carrying out demolition of DOC Divisions 1, 1A, 3, and 17 to reduce total footprint and energy
- Incorporating DOC diesel generator usage in Portfolio Manager totals for future years further refining emissions analysis

### **Appendix A: 2016 Energy Benchmarking Results of County-Owned Properties**

The following pages summarize the 2016 benchmarking results for each building. Data has been downloaded from Portfolio Manager, a secure online tool that tracks and measures energy consumption and greenhouse gas emissions for one building or multiple buildings in a portfolio.

Property Name	Primary Property Type	Year Built	No. of Bldgs.	ENERGY STAR Score	Site EUI (kBtu/ft²)	Source EUI (kBtu/ft²)	Source Energy Use (kBtu)	Site Energy Use (kBtu)	Electricity Use - Grid Purchase (kWh)	Natural Gas Use (therms)	GHG Emissions (Metric Tons CO2e)	GHG Emissions Intensity (kgCO2e/ ft <sup>2</sup> )
George W Dunne Office Building	Office	1965	1	91	70.7	153	125,464,650	58,110,107	9,037,766	272,732	7,133	9
Cook County Building	Office	1906	1	55	106.1	240	153,277,694	67,741,834	11,519,820	284,362	8,755	14
Rockwell Warehouse	Non- Refrigerated Warehouse	1927	1	75	52.8	94	41,858,172	23,632,475	2,390,111	154,774	2,325	5
Hawthorne Warehouse	Non- Refrigerated Warehouse	1905	1	37	97.7	131	64,880,656	48,304,736	1,985,770	415,293	3,455	7
Cicero Records Center	Non- Refrigerated Warehouse	2008	1	58	41.1	79	20,671,851	10,713,375	1,321,372	62,049	1,161	5
2nd District Courthouse Complex - Skokie	Courthouse	1980	2	65	72.4	203	70,104,748	25,025,245	6,146,087	40,548	3,865	11
2nd District Courthouse (Skokie)	Courthouse	1980	(1)	86	54.1	145	50,266,096	18,707,203	4,294,375	40,548	2,701	8
2nd District Courthouse (Skokie) Parking Structure	Parking	2002	(1)	N/A	13.1	41	19,838,656	6,318,043	1,851,712	N/A	1,165	2
3rd District Courthouse Complex - Rolling Meadows	Courthouse	1987	2	77	56	176	58,891,842	18,772,714	5,494,327	5,604	3,455	10
3rd District Courthouse (Rolling Meadows)	Courthouse	1987	(1)	80	52.9	166	55,615,413	17,729,265	5,188,510	5,604	3,263	10

Property Name	Primary Property Type	Year Built	No. of Bldgs.	ENERGY STAR Score	Site EUI (kBtu/ft²)	Source EUI (kBtu/ft²)	Source Energy Use (kBtu)	Site Energy Use (kBtu)	Electricity Use - Grid Purchase (kWh)	Natural Gas Use (therms)	GHG Emissions (Metric Tons CO2e)	GHG Emissions Intensity (kgCO2e/ ft <sup>2</sup> )
3rd District Courthouse (Rolling Meadows) Parking Structure	Parking	1987	(1)	N/A	1.8	6	3,110,578	990,630	290,337	N/A	183	0
4th District Courthouse Campus - Maywood	Courthouse	1975	4	N/A	87	268	74,360,392	24,100,396	6,879,038	6,291	4,360	16
Jefferson Building	Office	1965	(1)	52	80.3	252	11,908,123	3,792,396	1,111,488	N/A	699	15
Whitcomb Building	Office	1965	(1)	59	68.1	214	4,965,032	1,581,220	463,429	N/A	292	13
Sheriff Training Academy	Other - Public Services	1967	(1)	N/A	124.2	329	7,143,100	2,693,615	605,070	6,291	414	19
4th District Courthouse (Maywood)	Courthouse	1975	(1)	44	86.7	272	50,344,137	16,033,165	4,699,051	N/A	2,955	16
5th District Courthouse - Bridgeview	Courthouse	1989	1	52	77.7	242	81,059,261	26,037,245	7,533,242	3,505	4,738	14
Domestic Violence Courthouse	Courthouse	1890	1	65	97	214	39,996,363	18,158,874	2,934,975	81,447	2,278	12
6th District Courthouse - Markham	Courthouse	1980	1	51	82.8	250	79,457,749	26,285,792	7,272,063	16,186	4,573	14
Juvenile Temporary Detention Center Campus	Prison/ Incarceration	1973	3	N/A	95.9	218	223,096,359	98,200,343	16,825,780	407,908	12,748	13
Juvenile Temporary Detention Center	Prison/ Incarceration	1974	(1)	N/A	88.7	189	115,346,863	54,218,150	8,191,999	262,670	6,547	11
Juvenile Courthouse	Courthouse	1993	(1)	61	99.9	240	99,103,188	41,228,592	7,826,747	145,237	5,694	14
JTDC Parking Structure	Parking	1993	(1)	N/A	3.5	11	8,646,311	2,753,602	807,035	N/A	508	1
Institute of Forensic Medicine	Other - Public Services	1982	1	N/A	212	415	32,909,822	16,825,626	2,137,532	95,324	1,851	23

Property Name	Primary Property Type	Year Built	No. of Bldgs.	ENERGY STAR Score	Site EUI (kBtu/ft²)	Source EUI (kBtu/ft²)	Source Energy Use (kBtu)	Site Energy Use (kBtu)	Electricity Use - Grid Purchase (kWh)	Natural Gas Use (therms)	GHG Emissions (Metric Tons CO2e)	GHG Emissions Intensity (kgCO2e/ ft <sup>2</sup> )
Cook County Department of Corrections Campus	Prison/ Incarceration	1926	57	N/A	138.2	226	1,034,374,567	631,684,721	52,040,584	4,541,222	56,849	12
CCDOTH Maintenance Facility District 1	Repair Services	1954	4	N/A	102.8	126	7,117,723	5,812,565	142,269	53,271	372	7
CCDOTH Maintenance Facility District 3	Repair Services	1950	3	N/A	88.7	138	6,393,615	4,109,817	291,444	31,154	349	8
CCDOTH Maintenance Facility District 2	Repair Services	1990	4	N/A	101.6	129	7,987,827	6,292,090	193,678	56,313	421	7
CCDOTH Maintenance Facility District 4	Repair Services	1969	5	N/A	130.6	163	11,143,013	8,937,456	246,622	80,960	585	9
CCDOTH Maintenance Facility District 5	Repair Services	1987	3	N/A	99.5	138	10,741,062	7,767,339	362,548	65,303	575	7
Oak Forest Hospital Campus	Medical Office	1910	52	N/A	158.2	266	291,832,997	173,694,584	15,348,821	1,213,244	16,097	15
CORE Center	Medical Office	1998	1	1	783.8	1,475	46,521,683	24,729,508	2,882,550	148,942	2,604	83
Provident Hospital Campus	Hospital	1981	2	4	276.7	519	194,076,420	103,479,717	11,978,930	626,076	10,859	29
Provident Hospital	Hospital	1981	(2)	3	272	504	188,566,889	101,725,089	11,464,678	626,076	10,536	28
Provident Hospital Parking Structure	Parking	1991	1	N/A	6.6	21	5,104,857	1,625,751	476,480	N/A	300	1
Stroger Hospital Campus	Hospital	2002	4	17	287.7	519	935,932,295	518,427,974	54,912,142	3,310,677	52,119	29
Hektoen Building	Laboratory	1964	2	N/A	138	171	31,619,317	25,473,071	683,290	231,417	1,659	9
Cottage Grove Health Center	Medical Office	2000	1	6	100.8	210	2,811,578	1,347,323	195,887	N/A	123	9
Piszcezek TB Clinic	Medical Office	1957	1	39	150.7	250	4,830,837	2,916,103	248,059	20,697	266	14
Des Plaines TB Clinic	Medical Office	1991	1	N/A	143.3	266	662,388	356,779	40,354	2,191	37	15
Logan Square Health Center	Medical Office	1962	1	34	80.2	175	1,428,695	655,529	103,826	3,013	81	10

Property Name	Primary Property Type	Year Built	No. of Bldgs.	ENERGY STAR Score	Site EUI (kBtu/ft²)	Source EUI (kBtu/ft²)	Source Energy Use (kBtu)	Site Energy Use (kBtu)	Electricity Use - Grid Purchase (kWh)	Natural Gas Use (therms)	GHG Emissions (Metric Tons CO2e)	GHG Emissions Intensity (kgCO2e/ ft <sup>2</sup> )
Englewood Health Center	Medical Office	2000	1	1	186.1	562	6,046,957	2,004,102	552,883	1,177	354	33
Harvey TB Clinic	Medical Office	1962	1	N/A	52.6	65	176,813	143,174	3,713	1,305	9	3
Robbins Health Center	Medical Office	2000	1	13	97.4	199	2,852,540	1,394,081	194,747	N/A	123	9
Cicero Health Center	Medical Office	1999	1	31	69.4	199	1,688,897	590,889	149,832	N/A	94	11
Prieto Health Center	Medical Office	1994	1	11	118.5	242	4,101,091	2,011,375	278,940	10,596	232	14
Provident Hospital Pharmacy	Medical Office	2005	1	8	114.9	360	2,368,398	755,889	220,824	24	139	21
Sheriff Central Warrants	Public Safety	1955	1	N/A	82.6	148	2,880,249	1,605,162	167,552	10,335	160	8
Rockwell Garage	Parking	1927	1	N/A	195.4	255	1,220,541	935,361	33,433	8,213	65	14

NOTE: NO. OF BLDGS. IN ( ) INDICATE CAMPUS PORTFOLIOS WHERE THE BUILDINGS ARE COUNTED ELSEWHERE TO AVOID DOUBLE COUNTING

### CORPORATE FACILITIES (CF)

Property ID	Property Name	Address	City	Zip Code	Primary Use	Dept/ Agency	Owned/ Leased	Year Built	GSF
CF.001.001	County Building	118 N. Clark St.	Chicago	60602	Public	Multiple	Owned/ Leased	1/1/1906	638,592
CF.002.001	George W. Dunne Admin. Building- Main	69 W. Washington St.	Chicago	60602	Admin	Multiple	Owned	1/1/1964	787,888
CF.002.002	George W. Dunne Admin. Building- Generator Building	69 W. Washington St.	Chicago	60602	Admin	Multiple	Owned	1/1/2002	896
CF.003.001	CCHD Maintenance Fac. Dist. 1 - Bldg. A	2325 N. Meacham Rd.	Schaumburg	60173	Garage	CCHD	Owned	1/1/1954	16,159
CF.003.002	CCHD Maintenance Fac. Dist. 1 - Bldg. B	2325 N. Meacham Rd.	Schaumburg	60173	Garage	CCHD	Owned	1/1/1986	24,350
CF.003.003	CCHD Maintenance Fac. Dist. 1 - Bldg. C	2325 N. Meacham Rd.	Schaumburg	60173	Garage	CCHD	Owned	1/1/1995	8,241
CF.003.004	CCHD Maintenance Fac. Dist. 1 - Bldg. D	2325 N. Meacham Rd.	Schaumburg	60173	Garage	CCHD	Owned	1/1/1988	7,818
CF.004.001	CCHD Maintenance Fac. Dist. 2 - Bldg. A	9801 Ballard Rd.	Des Plaines	60016	Garage	CCHD	Owned	1/1/2000	20,753
CF.004.002	CCHD Maintenance Fac. Dist. 2 - Bldg. B	9801 Ballard Rd.	Des Plaines	60016	Garage	CCHD	Owned	1/1/2000	18,688
CF.004.003	CCHD Maintenance Fac. Dist. 2 - Bldg. C	9801 Ballard Rd.	Des Plaines	60016	Garage	CCHD	Owned	1/1/1990	14,574
CF.004.004	CCHD Maintenance Fac. Dist. 2 -Bldg. D	9801 Ballard Rd.	Des Plaines	60016	Garage	CCHD	Owned	1/1/2000	7,896
CF.006.001	CCHD Maintenance Fac. Dist. 4 - Bldg. A	8900 W. 135th St.	Orland Park	60462	Garage	CCHD	Owned	1/1/1969	17,582
CF.006.002	CCHD Maintenance Fac. Dist. 4 - Bldg. B	8900 W. 135th St.	Orland Park	60462	Garage	CCHD	Owned	1/1/1975	4,000
CF.006.003	CCHD Maintenance Fac. Dist. 4 - Bldg. C	8900 W. 135th St.	Orland Park	60462	Garage	CCHD	Owned	1/1/1975	18,997
CF.006.004	CCHD Maintenance Fac. Dist. 4 - Bldg. D	8900 W. 135th St.	Orland Park	60462	Garage	CCHD	Owned	1/1/1984	7,708
CF.006.005	CCHD Maintenance Fac. Dist. 4 - Bldg. E	8900 W. 135th St.	Orland Park	60462	Garage	CCHD	Owned	1/1/2007	20,157
CF.007.001	CCHD Maintenance Fac. Dist. 5 - Bldg. A	13600 S. Ashland Ave.	Riverdale	60827	Garage	CCHD	Owned	1/1/2002	24,794
CF.007.002	CCHD Maintenance Fac. Dist. 5 - Bldg. B	13600 S. Ashland Ave.	Riverdale	60827	Garage	CCHD	Owned	1/1/1987	45,636
CF.007.003	CCHD Maintenance Fac. Dist. 5 - Bldg. C	13600 S. Ashland Ave.	Riverdale	60827	Garage	CCHD	Owned	1/1/2002	7,662
CF.008.001	Rockwell Warehouse	2323 S. Rockwell St.	Chicago	60608	Storage	Multiple	Owned	1/1/1979	447,418
CF.009.001	Hawthorne Warehouse	4545 W. Cermak Rd.	Chicago	60623	Storage	Multiple	Owned	1/1/1905	354,672
CF.010.001	Public Administrator Warehouse	7232 N. Western Ave.	Chicago	60645	Storage/Public Service	Administrator	Leased		7,709

### PUBLIC SAFETY (PS)

Property ID	Property Name	Address	City	Zip	Primary	Dept/	Owned/	Year	GSF
		Address		Code	Use	Agency	Leased	Tear	- USF
PS.011.000	DOC Site	26th/S. California	Chicago	60608	Courts	Sheriff	Owned		
PS.011.001	Criminal Courts (26th/California)	2650 S. California Ave.	Chicago	60608	Courts	Circuit Court	Owned	1/1/1927	324438
PS.011.002	Criminal Court Admin. Building	2650 S. California Ave.	Chicago	60608	Admin	Multiple	Owned	1/1/1978	472493
PS.011.003	RTU-RCDC	2750 S. California Ave.	Chicago	60608	Detention		Owned	1/1/2013	283401
PS.011.004	DOC Central Chiller Plant	3045 S. Sacramento Ave.	Chicago	60608	Utility	Multiple	Owned	1/1/1990	18225
PS.011.005	DOC Cermak Hospital	2800 S. California Ave.	Chicago	60608	Medical	CCHHS	Owned	1/1/1998	161590
PS.011.006	DOC Div. II, Dorm I	2809 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1958	54484
PS.011.007	DOC Div. II, Dorm II	2807 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1955	54741
PS.011.008	DOC Div. II, Dorm III	2805 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1955	54717
PS.011.009	DOC Div. II, Dorm IV	2803 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1972	45203
PS.011.010	DOC Division I	2602 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1929	344268
PS.011.011	DOC Division III	2750 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1973	81511
PS.011.012	DOC Division III Annex (RTU)	2811 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1985	78023
PS.011.013	DOC Division IV	2649 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	122362
PS.011.014	DOC Division IX	2834 W. 31st St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1990	311786
PS.011.015	DOC Division V	2708 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1978	364560
PS.011.016	DOC Division VI	2901 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1978	264238
PS.011.017	DOC Division VII-Div I Annex	2604 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1929	68088
PS.011.018	DOC Division X	2950 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1991	211562
PS.011.019	DOC Division XI	3015 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1995	630380
PS.011.020	DOC Division XVII (Old Cermak Hospital)	2724 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1958	54309
PS.011.021A	DOC Guard House A	2600 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	234
PS.011.021B	DOC Guard House B	2602 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	2064
PS.011.021C	DOC Guard House C	2600 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	58
PS.011.021D	DOC Guard House D	2950 S. California Ave	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	249
PS.011.021E	DOC Guard House E	3000 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	167
PS.011.021F	DOC Guard House F	3026 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1970	1392
PS.011.021G	DOC Guard House G	2828 W. 31st Street	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	410
PS.011.021H	DOC Guard House H	2901 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1956	156
PS.011.021I	DOC Guard House I	2801 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	234
PS.011.021J	DOC Guard House J	2717 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	234
PS.011.021K	DOC Guard House K	2950 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1999	375

### PUBLIC SAFETY (PS)

Property ID	Property Name	Address	City	Zip Code	Primary Use	Dept./ Agency	Owned/ Leased	Year	GSF
PS.011.022A	DOC Guard Tower A	26th - Adjacent to Div. I Annex	Chicago	60608	Detention	Sheriff	Owned	1/1/1929	372
PS.011.022B	DOC Guard Tower B	2602 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1929	347
PS.011.022C	DOC Guard Tower C	Inside Campus	Chicago	60608	Detention	Sheriff	Owned	1/1/1991	272
PS.011.022D	DOC Guard Tower D	California - b/w Div. III & Div. X	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	224
PS.011.022E	DOC Guard Tower E	Inside Campus - b/w Old RTU	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	224
PS.011.022F	DOC Guard Tower F	2901 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	224
PS.011.022G	DOC Guard Tower G	2901 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1955	284
PS.011.022H	DOC Guard Tower H	Sacramento - adj. to Div. VI	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	224
PS.011.022I	DOC Guard Tower I	2801 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	224
PS.011.022J	DOC Guard Tower J	2717 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	224
PS.011.022K	DOC Guard Tower K	Sacramento - Adj. to Div. I yard	Chicago	60608	Detention	Sheriff	Owned	1/1/1929	375
PS.011.022L	DOC Guard Tower L	Corner of Sacramento & 26th	Chicago	60608	Detention	Sheriff	Owned	1/1/1929	341
PS.011.022	DOC Guard Tower M	26th - NW corner of Div. I	Chicago	60608	Detention	Sheriff	Owned	1/1/1929	332
PS.011.022N	DOC Guard Tower N	3015 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1999	402
PS.011.0220	DOC Guard Tower O	3015 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1999	402
PS.011.022P	DOC Guard Tower P	3015 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1999	402
PS.011.022Q	DOC Guard Tower Q	3015 S. California Ave.	Chicago	60608		Sheriff	Owned	1/1/1999	402
PS.011.023	DOC Gym (Div. IV)	2649 S. Sacramento Ave	Chicago	60608	Detention	Sheriff	Owned	1/1/1976	31292
PS.011.024	DOC Kitchen	2735 S. Sacramento Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1994	95904
PS.011.025A	DOC Powerhouse	3045 S. Sacramento Ave.	Chicago	60608	Utility	Sheriff	Owned	1/1/1957	22622
PS.011.025B	DOC Powerhouse	3045 S. Sacramento Ave.	Chicago	60608	Utility	Sheriff	Owned	1/1/1992	3716
PS.011.026	DOC South Campus Building 1	3026 S. California Ave.	Chicago	60608	Admin	Sheriff	Owned	1/1/1910	40966
PS.011.027	DOC South Campus Building 2	3036 S. California Ave.	Chicago	60608	Admin	Sheriff	Owned	1/1/1910	89011
PS.011.028	DOC South Campus Building 3	3026 S. California Ave.	Chicago	60608	Detention	Sheriff	Owned	1/1/1910	74186
PS.011.029	DOC South Campus Building 4	2828 W. 31st St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1910	49346
PS.011.030	DOC South Campus Building 5	2840 W. 31st St.	Chicago	60608	Admin	Sheriff	Owned	1/1/1910	34114
PS.011.031	Boot Camp Building #1	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	8432
PS.011.032	Boot Camp Building #2	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	8432
PS.011.033	Boot Camp Building #3	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	8432
PS.011.034	Boot Camp Building #4	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	8432
PS.011.035	Boot Camp Building #5	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	5429
PS.011.036	Boot Camp Building #6	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	7707

### PUBLIC SAFETY (PS)

Property ID	Property Name	Address	City	Zip Code	Primary Use	Dept/ Agency	Owned/ Leased	Year	GSF
PS.011.037	Boot Camp Building #7	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	10400
PS.011.038	Boot Camp Building #8	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	6814
PS.011.039	Boot Camp Building #9	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	6267
PS.011.040	Boot Camp Building #10	2801 S. Rockwell St.	Chicago	60608	Detention	Sheriff	Owned	1/1/1996	1847
PS.011.041	DOC Tunnels	2700 S. California Ave.	Chicago	60608	Utility	Sheriff	Owned	1/1/1955	45600
PS.011.044	DOC Parking Structure	26th/California	Chicago	60608	Parking	Sheriff	Owned	1/1/1976	463597
PS.013.001	Domestic Violence Courthouse	555 W. Harrison St.	Chicago	60607	Courts	Circuit Court	Owned		187,268
PS.014.001	Juvenile West (Courthouse)	1100 S. Hamilton Ave.	Chicago	60612	Courts	Circuit Court	Owned	1/1/1993	412,596
PS.015.001	Markham Courthouse (6 <sup>th</sup> Dist.)	16501 S. Kedzie Ave.	Markham	60428	Courts	Circuit Court	Owned	1/1/1977	317,652
PS.029.001	Jefferson Building	1401 Maybrook Dr.	Maywood	60153	Sheriff	Multiple	Owned	1/1/1965	47,254
PS.030.001	Sheriff Training Academy	1401 Maybrook Dr.	Maywood	60153	Police	Sheriff	Owned	1/1/1967	21,687
PS.031.001	Whitcomb Building	1311 Maybrook Dr.	Maywood	60153	Admin	Multiple	Owned	1/1/1965	23,217
PS.016.001	Maywood Courthouse (4th Dist.)	1500 Maybrook Dr.	Maywood	60153	Courts	Circuit Court	Owned	1/1/1975	184,841
PS.017.001	Rolling Meadows Courthouse (3rd District)	2121 Euclid Ave.	Rolling	60008	Courts	Circuit Court	Owned	1/1/1987	335,205
PS.017.002	Rolling Meadows Courthouse Parking Structure	2121 Euclid Ave.	Rolling	60008	Parking	Circuit Court	Owned	1/1/1987	554,767
PS.018.001	Skokie Courthouse (2nd District)	5600 Old Orchard Rd.	Skokie	60077	Courts	Circuit Court	Owned	1/1/1980	345,743
PS.018.002	Skokie Courthouse (2nd Dist.) Parking Structure	5600 Old Orchard Rd.	Skokie	60077	Parking	Circuit Court	Owned	1/1/2002	483,451
PS.022.001	Bridgeview Courthouse (5th Dist.)	10220 S. 76th Ave.	Bridgeview	60455	Courts	Circuit Court	Owned	1/1/1989	335,205
PS.028.001	Juvenile Temp. Detention Center	1100 S. Hamilton Ave.	Chicago	60612	Detention	Circuit Court	Owned	1/1/1974	611,255
PS.028.002	JTDC Parking Structure	1101 S. Hamilton Ave.	Chicago	60612	Parking	Circuit Court	Owned	1/1/1993	788,777
PS.096.001	Clerk of the Circuit Ct. Warehouse	1330 S. 54th Avenue	Cicero	60804	Storage	Circuit Court	Owned	2009	260,725
CF.005.001	CCHD Maintenance Fac. Dist. 3 - Bldg. A	901 W. 26th St.	LaGrange	60526	Garage	Sheriff	Owned	1/1/1950	24,469
CF.005.002	CCHD Maintenance Fac. Dist. 3 - Bldg. B	901 W. 26th St.	LaGrange	60526	Garage	Sheriff	Owned	1/1/1950	19,823
CF.005.003	CCHD Maintenance Fac. Dist. 3 - Bldg. C	901 W. 26th St.	LaGrange	60526	Garage	Sheriff	Owned	1/1/1985	2,031

### HEALTH & HOSPITAL (HH)

Property ID	Property Name	Address	City	Zip Code	Primary Use	Dept/ Agency	Owned/ Leased	Year Built	GSF
HH.046.002	OFH Administration Building, Floors 1,2,3	15900 S. Cicero Ave.	Oak Forest	60452	Admin	ССННЅ	Owned	1/1/1910	16,454
HH.046.003	OFH Brick Storage	15900 S. Cicero Ave.	Oak Forest	60452	Storage	CCHHS	Owned	1/1/1910	793
HH.046.004	OFH Building A	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1910	26,906
HH.046.005	OFH Building B	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1910	115,891
HH.046.006	OFH Building C	15900 S. Cicero Ave.	Oak Forest	60452	Vacant	CCHHS	Owned	1/1/1910	114,413
HH.046.007	OFH Building D	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1910	25,382
HH.046.008	OFH Building E, New	15900 S. Cicero Ave.	Oak Forest	60452	Pharmacy	CCHHS	Owned	1/1/1991	121,153
HH.046.009	OFH Building E, Old	15900 S. Cicero Ave.	Oak Forest	60452	Storage	CCHHS	Owned	1/1/1910	29,620
HH.046.010	OFH Building F	15900 S. Cicero Ave.	Oak Forest	60452	Pharmacy	CCHHS	Owned	1/1/1910	60,326
HH.046.011	OFH Building H	15900 S. Cicero Ave.	Oak Forest	60452	Pharmacy	CCHHS	Owned	1/1/1910	64,940
HH.046.012	OFH Building J	15900 S. Cicero Ave.	Oak Forest	60452	Pharmacy	CCHHS	Owned	1/1/1958	79,845
HH.046.013	OFH Catholic Chapel & Offices	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1912	11,442
HH.046.016	OFH Comfort Station	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1912	1,064
HH.046.017	OFH Connecting Corridors (1st & 2nd Flr)	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1912	47,832
HH.046.019	OFH County Store	15900 S. Cicero Ave.	Oak Forest	60452	Vacant	CCHHS	Owned	1/1/1948	2,995
HH.046.020	OFH Dietary Building	15900 S. Cicero Ave.	Oak Forest	60452	Dietary	CCHHS	Owned	1/1/1910	19,776
HH.046.022	OFH Employee Annex	15900 S. Cicero Ave.	Oak Forest	60452	Public	CCHHS	Owned	1/1/1910	18,089
HH.046.023	OFH Employee Residence	15900 S. Cicero Ave.	Oak Forest	60452	Storage	CCHHS	Owned	1/1/1949	52,017
HH.046.024	OFH Generator Building B	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1980	426
HH.046.026	OFH Grounds Office	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1988	2,576
HH.046.027	OFH Halsted Street Pump House	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1940	1,021
HH.046.028	OFH Kitchen	15900 S. Cicero Ave.	Oak Forest	60452	Dietary	CCHHS	Owned	1/1/1912	20,375
HH.046.029	OFH Laboratory & Morgue	15900 S. Cicero Ave.	Oak Forest	60452	Medical	CCHHS	Owned	1/1/1954	9,373
HH.046.030	OFH Laundry	15900 S. Cicero Ave.	Oak Forest	60452	Storage	CCHHS	Owned	1/1/1915	21,105
HH.046.031	OFH Laundry Annex	15900 S. Cicero Ave.	Oak Forest	60452	Vacant	CCHHS	Owned	1/1/1912	6,892
HH.046.032	OFH Main Gate House	15900 S. Cicero Ave.	Oak Forest	60452	Public Service	CCHHS	Owned	1/1/1950	261
HH.046.033	OFH Main Pump House	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1980	2,099
HH.046.034	OFH Medical Residence	15900 S. Cicero Ave.	Oak Forest	60452	Vacant	CCHHS	Owned	1/1/1912	12,114
HH.046.035	OFH Medical Social Service	15900 S. Cicero Ave.	Oak Forest	60452	Public Service	CCHHS	Owned	1/1/1912	8,815
HH.046.036	OFH Paint Shop	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1947	4,745
HH.046.037	OFH Physical Plant Office	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1910	2,680

### HEALTH & HOSPITAL (HH)

Property ID	Property Name	Address	City	Zip Code	Primary Use	Dept/ Agency	Owned/ Leased	Year	GSF
HH.046.038	OFH Powerhouse, New	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1980	20,448
HH.046.039	OFH Powerhouse, Old	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1908	37,056
HH.046.040	OFH Protestant Chapel & Offices	15900 S. Cicero Ave.	Oak Forest	60452	Vacant	CCHHS	Owned	1/1/1912	4,525
HH.046.041	OFH Public Aid Offices (F Annex)	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1912	7,836
HH.046.042	OFH Public Safety	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1912	2,051
HH.046.043	OFH Pump House, Old	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned		636
HH.046.044	OFH Quincy Building	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1912	15,034
HH.046.045	OFH Recreation Building	15900 S. Cicero Ave.	Oak Forest	60452	Public	CCHHS	Owned	1/1/1954	53,244
HH.046.048	OFH Skilled Trade Garage	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1950	1,675
HH.046.049	OFH Sneed Hall	15900 S. Cicero Ave.	Oak Forest	60452	Admin	CCHHS	Owned	1/1/1912	18,983
HH.046.050	OFH Store Room #21	15900 S. Cicero Ave.	Oak Forest	60452	Storage	CCHHS	Owned	1/1/1988	15,690
HH.046.051	OFH Store Room #23	15900 S. Cicero Ave.	Oak Forest	60452	Storage	CCHHS	Owned	1/1/1912	4,924
HH.046.052	OFH Stucco Office	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1950	3,310
HH.046.054	OFH Truck Barn & Salt Shed	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1950	2,922
HH.046.056	OFH Fire Dept. Garage	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1940	1,004
HH.046.057	OFH Hazmat Building	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1947	201
HH.046.058	OFH Public Health Vehicle Storage	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/2010	5,368
HH.046.060	OFH Generator Building C	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1980	399
HH.046.061	OFH Generator Building E - New	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1991	503
HH.046.062	OFH Generator Building F-J	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1980	379
HH.046.063	OFH Generator Building E - Old	15900 S. Cicero Ave.	Oak Forest	60452	Utility	CCHHS	Owned	1/1/1980	389
HH.047.001	John H. Stroger Jr. Hospital	1901 W. Harrison St.	Chicago	60612	Hospital	CCHHS	Owned	1/1/2002	1,217,341
HH.047.003	JHS Campus Power Plant	750 S. Winchester Ave.	Chicago	60612	Utility	CCHHS	Owned	1/1/2002	54,251
HH.047.004	John H. Stroger Jr. Parking Structure	1800 W. Polk St.	Chicago	60612	Parking	CCHHS	Owned	1/1/1998	423,000
HH.067.001	Fantus Health Center	621 S. Winchester Ave.	Chicago	60612	Clinic	CCHHS	Owned	1/1/1959	205,793
HH.049.001	CCHHS Administration Building	1900 W. Polk St.	Chicago	60612	Admin	CCHHS	Owned	1/1/1931	324,708
HH.048.001	Provident Hospital	500 E. 51st St.	Chicago	60615	Hospital	CCHHS	Owned	1/1/1981	341,042
HH.048.002	Provident Outpatient Pharmacy	430 E. 50th Pl.	Chicago	60615	Pharmacy	CCHHS	Owned	1/1/2005	6,577
HH.048.004	John Sengstacke Clinic (former)	450 E. 51st St.	Chicago	60615	Vacant	CCHHS	Owned	1/1/1950	32,953
HH.048.005	Provident Hospital Parking Structure	5010 South Forestville Ave.	Chicago	60615	Parking	CCHHS	Owned	1/1/1991	245,541

### HEALTH & HOSPITAL (HH)

Property ID	Property Name	Address	City	Zip Code	Primary Use	Dept./ Agency	Owned/ Leased	Year	GSF
HH.050.001	Durand Building	639 W. Wood St.	Chicago	60612	Vacant	CCHHS	Owned	1/1/1914	38,058
HH.051.001	Hektoen Building	627 W. Wood St.	Chicago	60612	Admin/Lab	CCHHS	Owned	1/1/1964	146,477
HH.052.001	Rob't J. Stein Institute of Forensic Med	2121 W. Harrison St.	Chicago	60612	Medical	Admin	Owned	1/1/1982	79,368
HH.054.001	Ruth M. Rothstein Core Center	2020 West Harrison St.	Chicago	60612	Clinic	CCHHS	Owned	1/1/1998	31,550
HH.076.001	Old Main Hospital	1825 W. Harrison St.	Chicago	60612	Vacant	CCHHS	Owned	1/1/1913	320,000

### **APPENDIX C: PERFORMANCE METRICS – SITE VS. SOURCE ENERGY**

Site energy may be delivered to a building in one of two forms: primary or secondary energy. Primary energy is the raw fuel that is burned to create heat and electricity, such as natural gas or fuel oil used in onsite generation. Secondary energy is the energy product (heat or electricity) created from a raw fuel, such as electricity purchased from the grid or heat received from a district steam system. A unit of primary and a unit of secondary energy consumed at the site are not directly comparable because one represents a raw fuel while the other represents a converted fuel (U.S. Environmental Protection Agency, (www.energystar.gov/SourceEnergy).

Therefore, to assess the relative efficiencies of buildings with varying proportions of primary and secondary energy consumption, it is necessary to convert these two types of energy into equivalent units of raw fuel consumed to generate that one unit of energy consumed on-site. To achieve this equivalency, EPA uses source energy. Source energy accounts for losses that are incurred in the storage, transport, and delivery of fuel to the building. Source energy provides the most equitable way to combine primary and secondary energy types into a single common unit, ensuring that no building receives either a credit or a penalty based on its energy source or utility. For this report, all performance metrics are reported in "source energy."

### **APPENDIX D: 2016 WATER BENCHMARKING RESULTS**

Facility Name	Туре	City	TGAL Consumption	UOM	Water Intensity (gal/sq ft)	UOM
DOC Campus	PS	Chicago	466,633.36	1,000 Gallons	88.31	Gallons/sq ft
Oak Forest Hospital	НН	Chicago	60,070.05	1,000 Gallons	54.71	Gallons/sq ft
JTDC Campus	PS	Chicago	26,866.00	1,000 Gallons	43.95	Gallons/sq ft
Provident Hospital	НН	Chicago	22,098.47	1,000 Gallons	59.09	Gallons/sq ft
Cook County Building	CF	Chicago	11,813.26	1,000 Gallons	18.50	Gallons/sq ft
Rob't J. Stein Institute of Forensic Medicine	PS	Chicago	8,623.30	1,000 Gallons	108.65	Gallons/sq ft
Markham Courthouse (6th Dist.)	PS	Markham	4,800.00	1,000 Gallons	15.11	Gallons/sq ft
Maywood Courthouse (4th Dist.)	PS	Maywood	4,420.68	1,000 Gallons	23.92	Gallons/sq ft
Rolling Meadows Courthouse (3rd District)	PS	Rolling Meadows	2,192.45	1,000 Gallons	6.54	Gallons/sq ft
Domestic Violence Courthouse	PS	Chicago	1,971.60	1,000 Gallons	10.53	Gallons/sq ft
Stroger Hospital Campus	HH	Chicago	13,495.95	1,000 Gallons	7.49	Gallons/sq ft
Dunne Building	CF	Chicago	1,595.00	1,000 Gallons	1.94	Gallons/sq ft
Edward Piszczek TB Clinic	HH	Forest Park	1,563.32	1,000 Gallons	80.78	Gallons/sq ft
Bridgeview Courthouse (5th Dist.)	PS	Bridgeview	891.84	1,000 Gallons	2.66	Gallons/sq ft
CCDOTH District 5	PS	Blue Island	647.00	1,000 Gallons	8.29	Gallons/sq ft
Hawthorne Warehouse	CF	Chicago	526.73	1,000 Gallons	1.06	Gallons/sq ft
CCDOTH District 4	PS	Orland Park	330.50	1,000 Gallons	4.83	Gallons/sq ft
Jefferson Building - Maywood Campus	PS	Maywood	316.40	1,000 Gallons	6.70	Gallons/sq ft
CCDOTH District 1	PS	Schaumburg	257.00	1,000 Gallons	4.54	Gallons/sq ft
Cottage Grove Medical Center	HH	Chicago Heights	171.29	1,000 Gallons	12.81	Gallons/sq ft
Whitcomb Building - Maywood Campus	PS	Maywood	166.80	1,000 Gallons	7.18	Gallons/sq ft
Robbins Health Center	HH	Robbins	161.40	1,000 Gallons	11.28	Gallons/sq ft
CCDOTH District 2	PS	Des Plaines	152.97	1,000 Gallons	2.47	Gallons/sq ft
CCDOTH District 3	PS	LaGrange Park	127.54	1,000 Gallons	2.75	Gallons/sq ft
Cicero Health Center	НН	Cicero	109.96	1,000 Gallons	12.92	Gallons/sq ft
Englewood Health Center	НН	Chicago	105.20	1,000 Gallons	9.77	Gallons/sq ft
Logan Square Health Center	НН	Chicago	104.00	1,000 Gallons	12.73	Gallons/sq ft
Des Plaines TB Clinic	НН	Des Plaines	103.53	1,000 Gallons	41.60	Gallons/sq ft
Provident Outpatient Pharmacy	HH	Chicago	59.60	1,000 Gallons	9.06	Gallons/sq ft

Facility Name	Туре	City	TGAL Consumption	UOM	Water Intensity (gal/sq ft)	UOM
Juvenile West (Courthouse)	PS	Chicago	44.30	1,000 Gallons	0.11	Gallons/sq ft
Skokie Courthouse (2nd District)	PS	Skokie	43.32	1,000 Gallons	0.13	Gallons/sq ft
Ruth M. Rothstein Core Center	HH	Chicago	32.27	1,000 Gallons	1.02	Gallons/sq ft
Provident Parking Structure	РК	Chicago	28.00	1,000 Gallons	0.11	Gallons/sq ft
Rockwell Warehouse	CF	Chicago	19.95	1,000 Gallons	0.04	Gallons/sq ft
Dr. Jorge Prieto Health Center	HH	Chicago	8.81	1,000 Gallons	0.52	Gallons/sq ft
Hektoen Building	HH	Chicago	1.47	1,000 Gallons	0.01	Gallons/sq ft
Harvey TB Clinic	НН	Harvey	-	1,000 Gallons	0.00	Gallons/sq ft