

# THE COUNTY OF DUPAGE CAPITAL IMPROVEMENT PLAN SUPPLEMENTAL

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a great place to live, work and raise a family



#### LOCATION

Village of Glen Ellyn

#### ISSUE

Training for EV mechanics is needed to expand implementation.

#### SOLUTION

Expand College of DuPage training.

#### **BENEFIT**

Supports the transition to electric vehicles.

#### **COST ESTIMATE**

\$350,000—\$500,000

#### DISTRICTS REPRESENTED

US Senate - Illinois

US Representative District 6

**IL Senate District 21** 

IL Representative District 42

County Board District 4

# **ELECTRIC VEHICLE TRAINING CENTER** COLLEGE OF DUPAGE, GLEN ELLYN, IL



# PROJECT HISTORY & INFORMATION

As of January 2024, DuPage County is home to more than 144,000 electric vehicles. In order operation as well as on-car to maintain these vehicles into the future, automotive mechanic training is necessary.

The College of DuPage currently offers training for internal combustion engine vehicles with an associated certificate program. The College's goal is to offer hands-on course training to professionals in the field either in an accelerated format during the work-day at specific times of the year or at night to allow technicians to continue to work without as much disruption. The

course would cover the safety aspects, tooling required, diagnosis to familiarize technicians with different vehicle platforms they will encounter. The College is in need of tools and a variety of vehicles to offer the needed training.

In order for the County and other local governments that maintain their own fleets to transition to electric vehicle fleets, staff need to be trained to maintain electric vehicles.



#### LOCATION

Village of Woodridge

#### **ISSUE**

Biogas generation and flaring at wastewater treatment plant.

#### SOLUTION

Utilize biogas within the treatment plant.

#### **BENEFIT**

Reduce pollution, foster energy independence by replacing fuel with Renewable Natural Gas.

#### **COST ESTIMATE**

\$1,675,000

#### DISTRICTS REPRESENTED

US Senate - Illinois

**US Representative District 11** 

IL Senate District 41

IL Representative District 81

County Board District 3

# WASTEWATER TREATMENT PLANT BIOGAS REUSE



# PROJECT HISTORY & INFORMATION

DuPage County owns and operates the Woodridge Greene Valley Wastewater Treatment Plant that provides service to the Villages of Lisle, Woodridge, Downers Grove and portions of the City of Wheaton. The plant's processes generate digester gas that is currently flared.

The County has had the plant assessed for alternatives including reuse of the biogas within the plant. This option includes the replacement of three existing boilers with a dual-fuel boiler that would utilize the gas within the plant.

Other alternatives were investigated including treating gas for conversion to electricity and for pipeline injection and compression for use in vehicles. A 2020 study details each option and found utilizing the gas within the plant boilers was the most efficient and effective option without gas conditioning technology.

Boiler replacement with digester gas reuse has an estimated return on investment of 15 years with the reduction in natural gas consumption.



#### LOCATION

Village of Woodridge

#### **ISSUE**

Lack of funding for electric vehicle conversion with infrastructure.

#### SOLUTION

Install infrastructure & purchase 2 electric vehicles.

#### **BENEFIT**

Reduces transportation related greenhouse gas emissions.

#### **COST ESTIMATE**

\$150,000

#### **DISTRICTS REPRESENTED**

US Senate - Illinois

**US Representative District 11** 

**IL Senate District 41** 

IL Representative District 81

County Board District 3

# PUBLIC WORKS DEPARTMENT ELECTRIC VEHICLE FLEET CONVERSION



# PROJECT HISTORY & INFORMATION

DuPage County owns and operates the Woodridge Greene Valley Wastewater Treatment Plant that provides service to the Villages of Lisle, Woodridge, Downers Grove and portions of the City of Wheaton.

The Public Works Department desires to install the necessary conduit and infrastructure as part of a parking lot renovation so electric vehicle charging stations can be added to the site. Public Works would like to purchase a minimum of two vehicles for the fleet.

The Department consistently drives in the region as part of daily operations. Workers currently use gas-powered vehicles with frequent stops and short trips increasing emissions.

DuPage County Public Works would like to lead the County's fleet conversion.



#### LOCATION

Unincorporated Itasca Addison Township

#### ISSUE

Unincorporated subdivision currently without sewer or water services

#### SOLUTION

Expansion of the existing systems in the adjacent neighborhoods to provide sewer and/or water service BENEFIT

Better water quality and fire protection and / or a reliable sanitary sewer system for 20+ properties

#### COST ESTIMATE

Various \$300,000—\$3,000,000

#### DISTRICTS REPRESENTED

**US Representative District 8** 

IL Senate District 23

IL Representative District 45 County Board District 1

# NORDIC AREA VARIOUS SEWER AND WATER EXTENSIONS



# PROJECT HISTORY & INFORMATION

The Hills of Itasca is an unincorporated subdivision in Addison Township that is currently on private wells and individual septic could be completed in this area from systems. Recently the treatment plant has been reconstructed and there is an existing sanitary sewer main connected to the neighborhood watermain extensions into the that could be extended to serve more properties. In addition the County provides water service through our Nordic Water System in the subdivision adjacent to the west from here and could extend mains as needed to improve water quality with a municipally treated and

monitored source and provide fire protection within the neighborhood. Multiple projects with various scopes preliminary engineering to sanitary system lining which would eliminate infiltration to the treatment plant to neighborhood. These projects could benefit 20+ residential properties.



#### LOCATION

**DuPage County Campus** Wheaton, IL

#### ISSUE

Correctional facility furniture is made out of stainless steel.

#### SOLUTION

Purchase furniture that is made of softer and more comfortable materials.

#### BENEFIT

Assist detainees who might be experiencing mood and psychiatric disorders.

#### **COST ESTIMATE**

\$35,000

#### DISTRICTS REPRESENTED

US Representative Districts 3, 4, 6, 8, & 11

**IL Senate Districts** 4, 21, 23, 24, 25, 28, 33, 39, 41, 42, & 43

**IL Representative Districts** 7, 41, 42, 45, 46, 47, 48, 49, 50, 56, 65, 77, 81, 82, 84, & 85

**County Board Districts** 1, 2, 3, 4, 5, & 6

# CORRECTIONAL FACILITY THERAPEUTIC FURNITURE



# PROJECT HISTORY & INFORMATION

The development of furnishings that offer comparable durability to steel while enhancing safety and humaneness is a significant advancement in the correctional field. Not only can these furnishings contribute to a safer and more humane environment, but they also have the potential to make Correctional facilities more costeffective in the long run by reducing maintenance and replacement costs. dealing with such disorders. In

The correctional environment is evolving towards normalization and rehabilitation. Embracing environmental concepts in facility design and renovations can have a positive impact on human behavior and the effectiveness of rehabilitation efforts. This trend reflects a broader recognition of the importance of creating environments Total Cost: \$35,000. that support positive change and reintegration into society.

This furniture would be geared for all detainees in our facility, particularly those who are housed in our psych and medical pods. Those detainees in such pods, who might be experiencing mood and psychiatric disorders (such as anxiety, depression, PTSD, OCD, ADHD), would benefit by utilizing the therapeutic furniture to help them in relaxing and self-soothing when addition, the "living room area" style furniture, would also help encourage socialization within all our detainee housing areas.

The cost per detainee housing area is \$8,750. There are four (4) housing areas that would need to be replaced.