



**Economic Development
Administration University
Center**

Promoting green economic development in the Chicago region



**Nathalie P. Voorhees Center
for Neighborhood and
Community Improvement**

**CMAP, Joint meeting of the Economic
Development and Environmental and Natural
Resources Committees, March 22, 2021**

AGENDA

- Brownfield redevelopment
- Clean Energy Opportunities for Economic and Racial Equity

Complement. Co-Create. Catalyze.

Promote green economic development in the Chicago region through strategic community driven services that expand forward looking eco-friendly businesses and develop a highly skilled workforce talent pool that is prepared for these opportunities

Ecosystem Assessment

Deep dive

Workforce

Case studies

Site Inventory

Tools

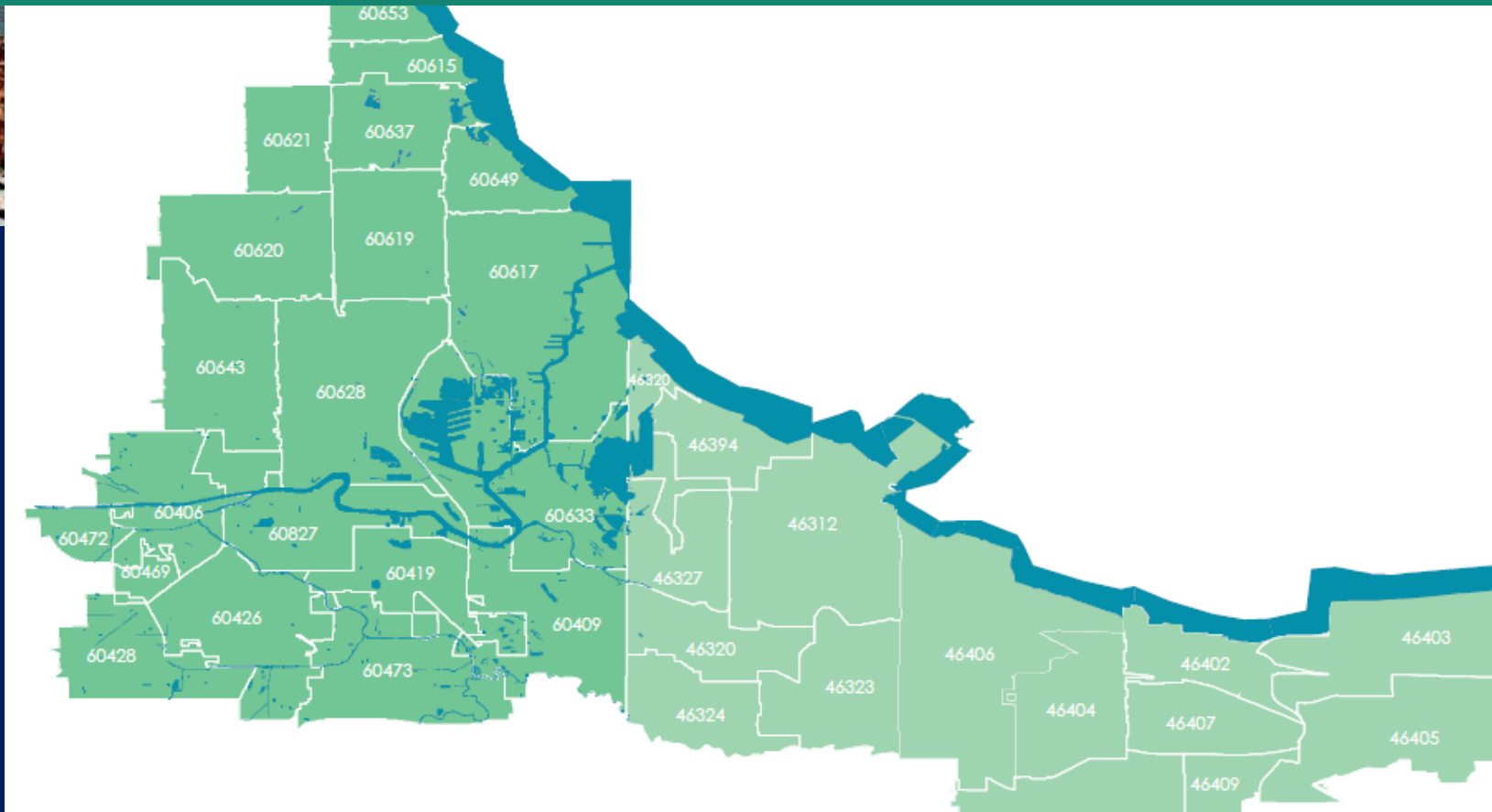
Stakeholders



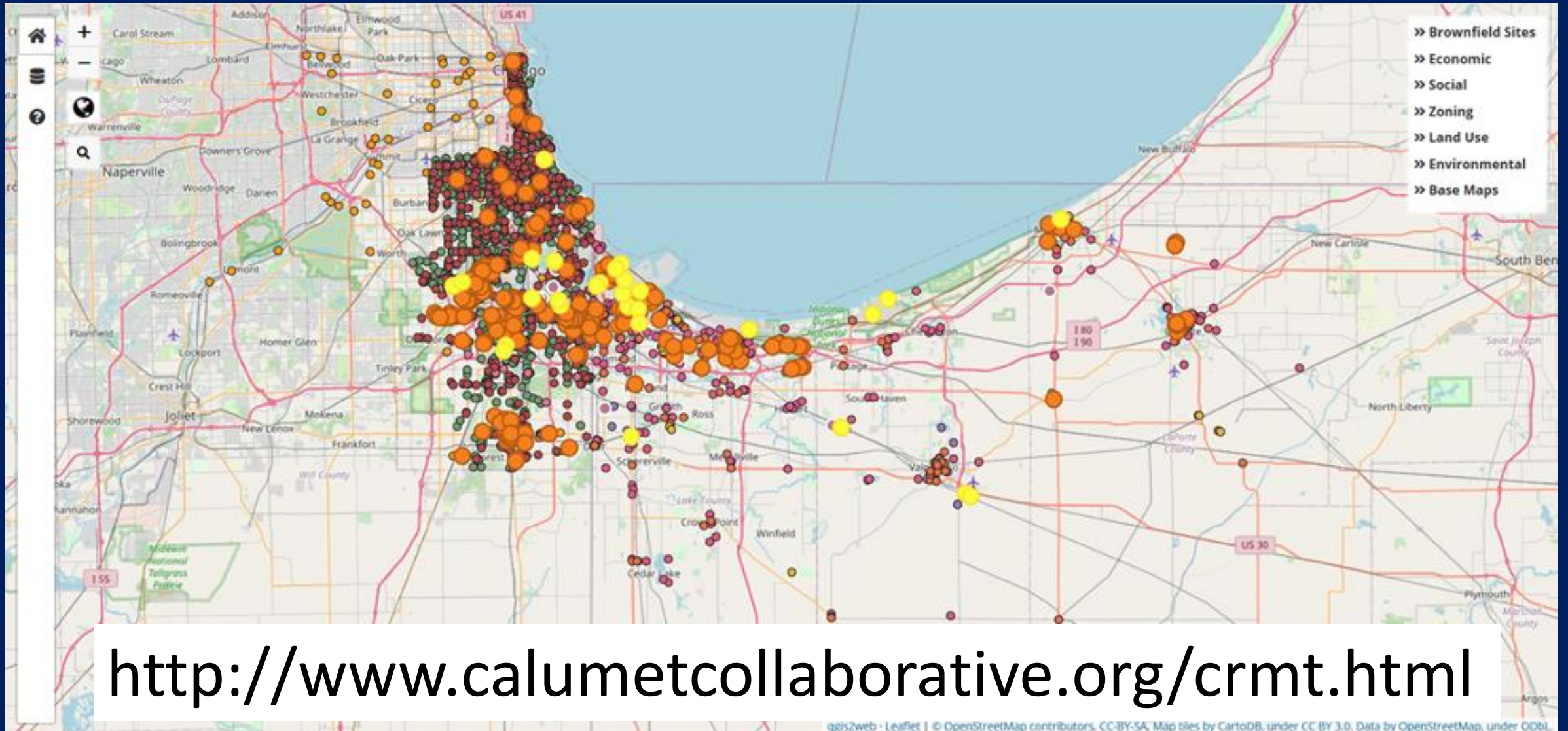
BROWNFIELD REDEVELOPMENT TOOL



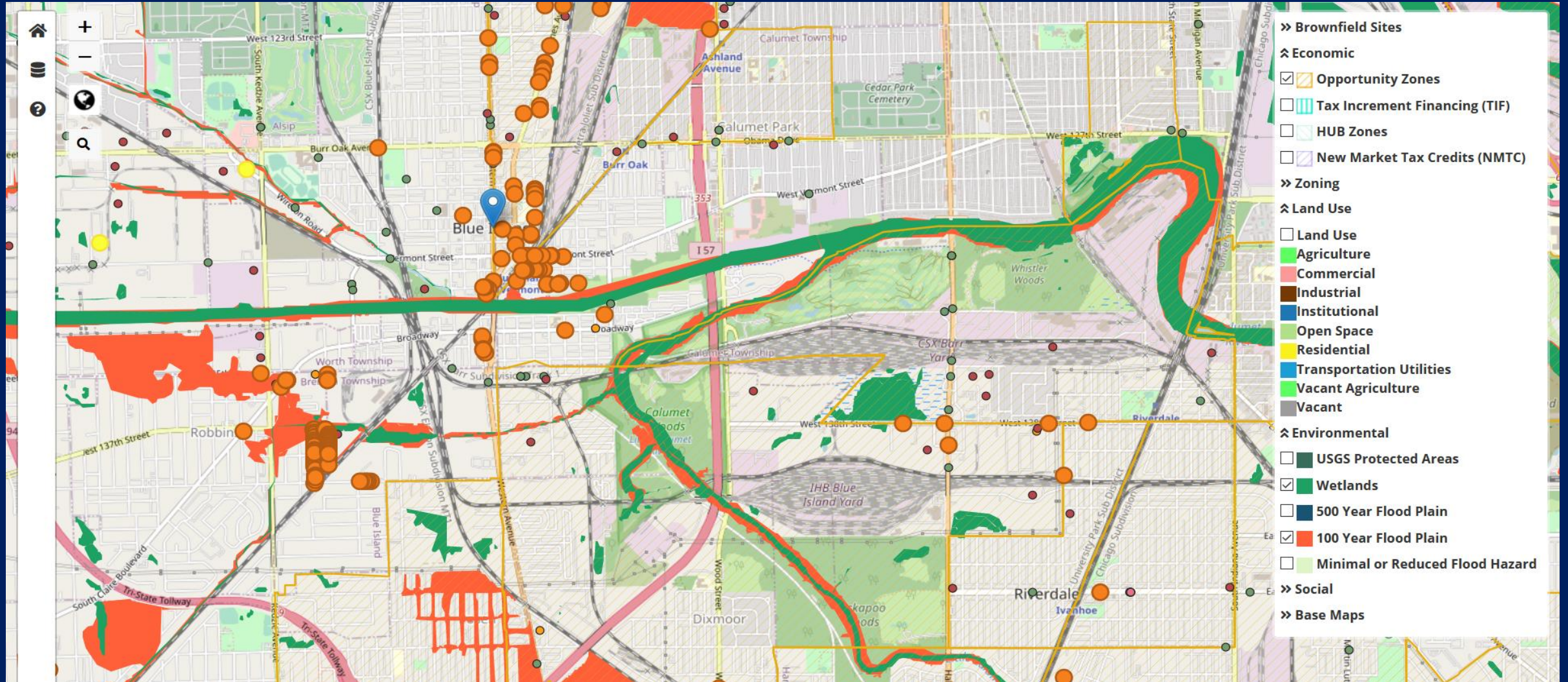
BROWNFIELD REDEVELOPMENT



Calumet Reinvestment Mapping Tool



CRMT Demonstration



**CLEAN ENERGY
OPPORTUNITIES FOR
RACIAL AND ECONOMIC
EQUITY**

Clean Energy Jobs Act (CEJA)

- Creating Clean Jobs Workforce Hubs, a network of frontline organizations that provide direct and sustained support for minority and disadvantaged communities, including job opportunities
- Prioritizing companies that implement equity actions to ensure equitable representation in Illinois' clean energy workforce
- Creating a Contractor Incubator program that focuses on the development of underserved businesses in the clean energy sector
- Creating Clean Energy Empowerment Zones to support communities and workers who are economically impacted by the decline of fossil fuel generation

Just Transition

“An intentional shift toward a society in which the economy and the environment can thrive simultaneously, with social structures in place to make sure equity takes priority in the process as well as the outcome.”

Chicago's Clean Energy Future

The Clean Energy Economy & Inclusion in the Chicago Region

May 2020



Nathalie P. Voorhees Center
for Neighborhood and
Community Improvement


2020 US Energy and Employment Report

Employers in Illinois gave the following as the top three reasons for their reported hiring difficulty:

1. Lack of experience, training, or technical skills
2. Competition/ small applicant pool
3. Insufficient non-technical skills (work ethic, dependability, critical thinking)

<https://www.usenergyjobs.org/>


O-NET Green Jobs

**O*NET OnLine**

Occupation Quick Search:

[Help](#) [Find Occupations](#) [Advanced Search](#) [Crosswalks](#) [Share](#) [O*NET Sites](#)

Summary Report for: 47-2231.00 - Solar Photovoltaic Installers

Updated 2018


Assemble, install, or maintain solar photovoltaic (PV) systems on roofs or other structures in compliance with site assessment and schematics. May include measuring, cutting, assembling, and bolting structural framing and solar modules. May perform minor electrical work such as current checks.

Sample of reported job titles: Installer, Photovoltaic Installer (PV Installer), PV Design and Installation Technician, Solar Designer/Installer, Solar Installer, Solar Installer Technician, Solar Photovoltaic Installer (Solar PV Installer), Solar Technician

View report: [Summary](#) [Details](#) [Custom](#)

[Tasks](#) | [Technology Skills](#) | [Tools Used](#) | [Knowledge](#) | [Skills](#) | [Abilities](#) | [Work Activities](#) | [Detailed Work Activities](#) | [Work Context](#) | [Job Zone](#) | [Education](#) | [Credentials](#) | [Interests](#) | [Work Styles](#) | [Work Values](#) | [Wages & Employment](#) | [Job Openings](#) | [Additional Information](#)

Tasks

5 of 26 displayed


- Install photovoltaic (PV) systems in accordance with codes and standards, using drawings, schematics, and instructions. ✓
- Assemble solar modules, panels, or support structures, as specified. ✓
- Apply weather sealing to array, building, or support mechanisms. ✓
- Determine appropriate sizes, ratings, and locations for all system overcurrent devices, disconnect devices, grounding equipment, and surge suppression equipment. ✓
- Install module array interconnect wiring, implementing measures to disable arrays during installation. ✓

[back to top](#)

Technology Skills

5 of 9 displayed [Show 48 tools used](#)

- Customer relationship management CRM software — Salesforce software 🔥
- Electronic mail software — Microsoft Outlook 🔥
- Enterprise application integration software — Extensible markup language XML 🔥
- Office suite software — Microsoft Office
- Spreadsheet software — Microsoft Excel 🔥

 Hot Technology — a technology requirement frequently included in employer job postings.

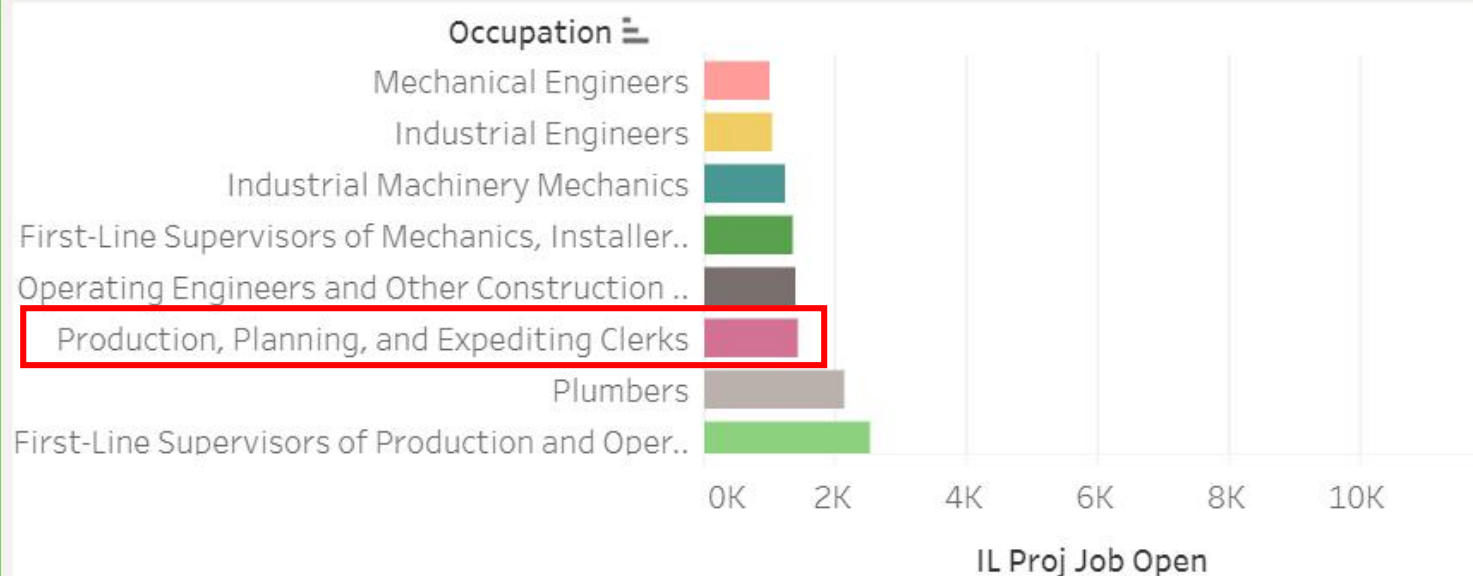
A DATABASE FOR A CHANGING ECONOMY

Review of the Occupational Information Network (O*NET)

NATIONAL RESEARCH COUNCIL
OF THE NATIONAL ACADEMIES

Green Jobs on the Rise in Illinois

Projected Jobs in Illinois in 2028



IL 2018 Median Wage

Occupation	
Inspectors, Testers, Sorters, Sam..	\$37,45
Machinists	\$38,54
Production, Planning, and Expedit..	\$46,44
Energy Brokers	\$52,09
Industrial Machinery Mechanics	\$54,93
Construction Laborers	\$56,71
First-Line Supervisors of Producti..	\$59,92
First-Line Supervisors of Mechani..	\$67,79
Carpenters	\$69,47
Electricians	\$79,77
Operating Engineers and Other C..	\$83,86
Plumbers	\$84,39
Industrial Engineers	\$85,57

Most Common Level of Education Acheived



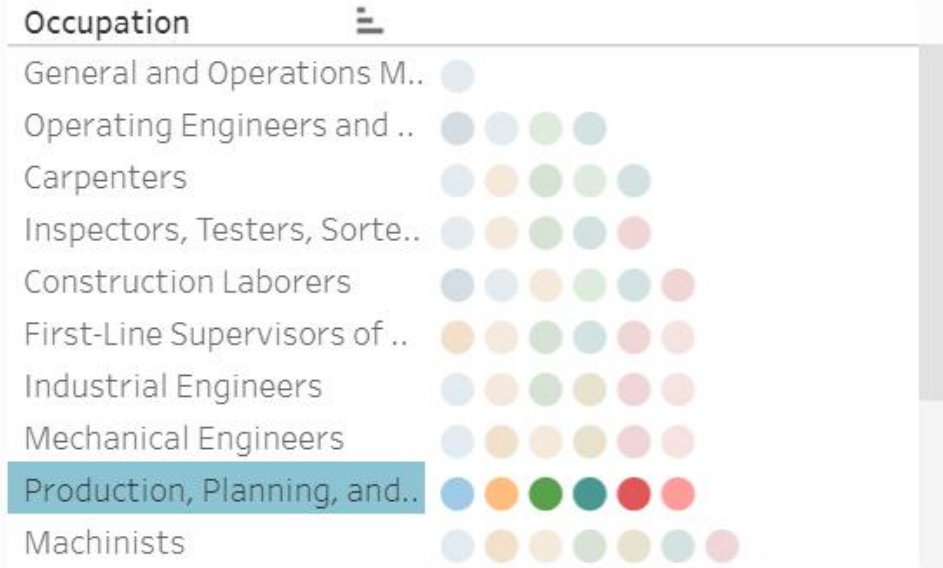


Skills, Abilities, and Technology for Green Jobs on the Rise in IL

Skills Needed in All Occupations

- Active Listening
- Complex Problem Solving
- Critical Thinking
- Equipment Maintenance
- Installation
- Judgment and Decision Making
- Mathematics
- Negotiation
- Operations Analysis
- Quality Control Analysis
- Reading Comprehension
- Service Orientation
- Social Perceptiveness
- Systems Analysis
- Systems Evaluation
- Time Management
- Troubleshooting
- Writing

Abilities by Occupation



Abilities

- Control Precision
- Deductive Reasoning
- Fluency of Ideas
- Inductive Reasoning
- Information Ordering
- Manual Dexterity
- Mathematical Reasoning
- Memorization
- Problem Sensitivity
- Spatial Orientation
- Written Comprehension
- Written Expression

Tech Skills by Occupation



Tech Skills

- Accounting software
- Computer aided design
- Customer relationship management
- Data base management
- Electronic mail software
- Financial analysis software
- Graphics or photo software
- Industrial control software
- Inventory management software
- Map creation software
- Medical software
- Office suite software



**Economic Development
Administration University
Center**

Promoting green economic development in the Chicago region



**Nathalie P. Voorhees Center
for Neighborhood and
Community Improvement**

Contact Janet Smith at janets@uic.edu