More data. **Less Carbon.** Zero Excuses.

BuildSmart DC

A Public-facing, Municipal Building Efficiency Portal for the District

MWCOG| 12-14-15

Zach Dobelbower & Zach Wilson
Program Management Team, DGS (DC Gov)
Sustainability & Energy Division

BuildSmart DC

Site Overview: Main Pages

BUILDINGS

Search the Building Directory to learn about utility costs, building performance and efficiency projects.

Enter Keyword | SEARCH

FILTER

1-15 of 356 buildings

Waterfront Municipal Center West
1101 4TH STREET SW
Office — **EnergyStar Rating 50**

Department of Human Services #1
2100 MARTIN LUTHER KING JR AVENUE SE
Office — **EnergyStar Rating 45**

Parkview Elementary
3560 WARDER STREET NW
Repurposed School — **EnergyStar Rating 54**

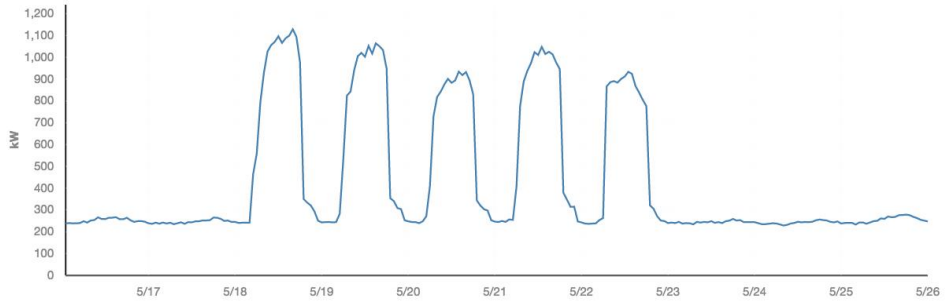
Waterfront Municipal Center East

1100 4TH STREET SW

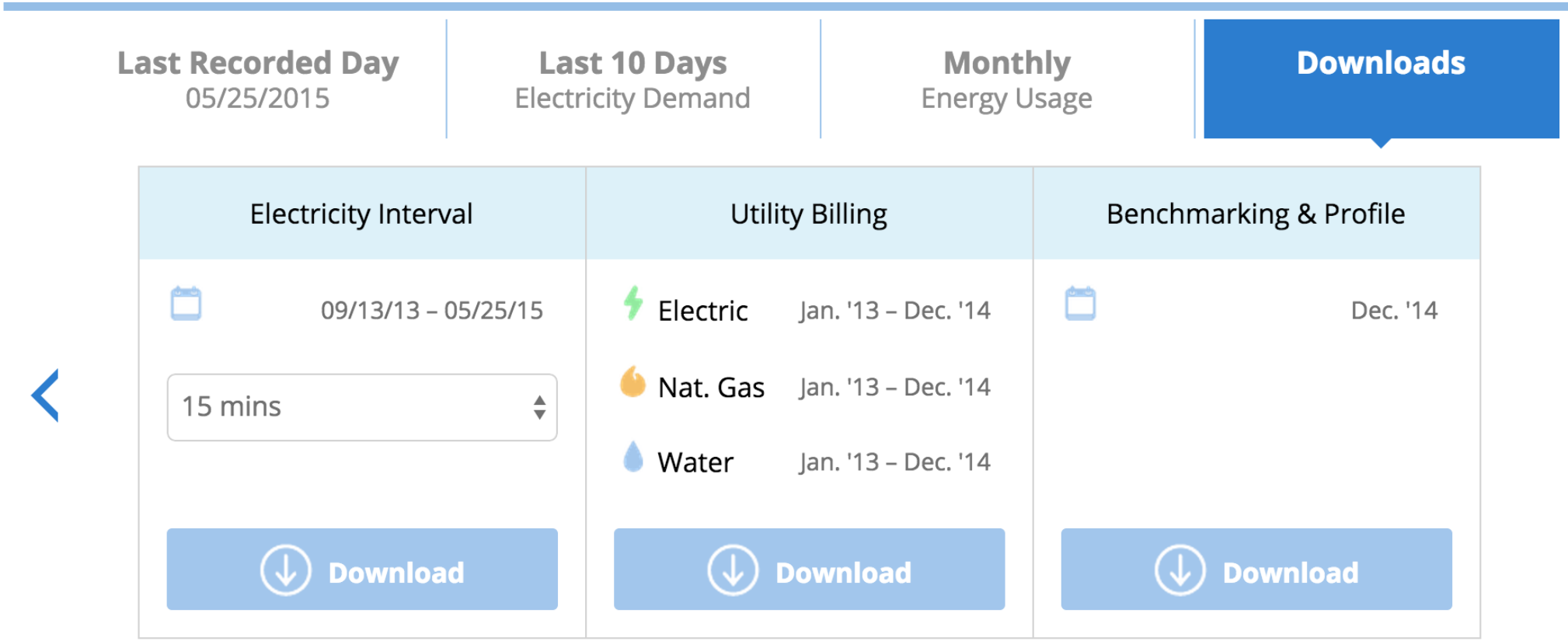
ENERGY STAR RATING **90**

Waterfront Station is a mixed-use urban center in Southwest Washington, DC. The project includes seven new buildings totaling over 2 million square feet including Class-A office space, new residential units and neighborhood oriented retail in the heart of Southwest. Show More

Last Recorded Day 05/25/2015 | **Last 10 Days Electricity Demand** | Monthly Energy Usage | Downloads



Site Overview: Public Data Downloader



Site Overview: Admin Tools 1

Select data to export: Electricity Interval

Select from: Buildings

Filter by tag: Office

Load a report: two years all sites hourly — Delete report

100 H Street NE Lights
107 Wayne Place Apartments
10th Street Overlook Lights
117 Wayne Place Apartments
11th Street Bridge Lighting (East)
11th Street Bridge Lighting (West)
1200 Block 16th Street NW Lights
13th & E St Park
14th Street Bridge Lights
1st & Florida Park
1st District Headquarters
1st District Substation
200 I Street Municipal Building
2nd District Headquarters
3rd District Headquarters
4th District Headquarters
4th District Substation
5th District Headquarters
5th St. Bus Lot
6th District Headquarters
6th District Substation
7th District Headquarters

Add all

Remove all

Export settings

Time range

Last week | Last month | Last year

Time granularity: Hourly

Start date: 02/01/2013

End date: 02/01/2015

Select export format

Aggregate intervals by
- (•) Building
- ( ) Account
- ( ) Meter (No aggregation)

Add to header
- [x] Building name
- [ ] Account
- [x] Address
- [x] Building type

Insert totals
- [ ] By row
- [ ] By column

[ ] Pivot results

[ ] Save report format

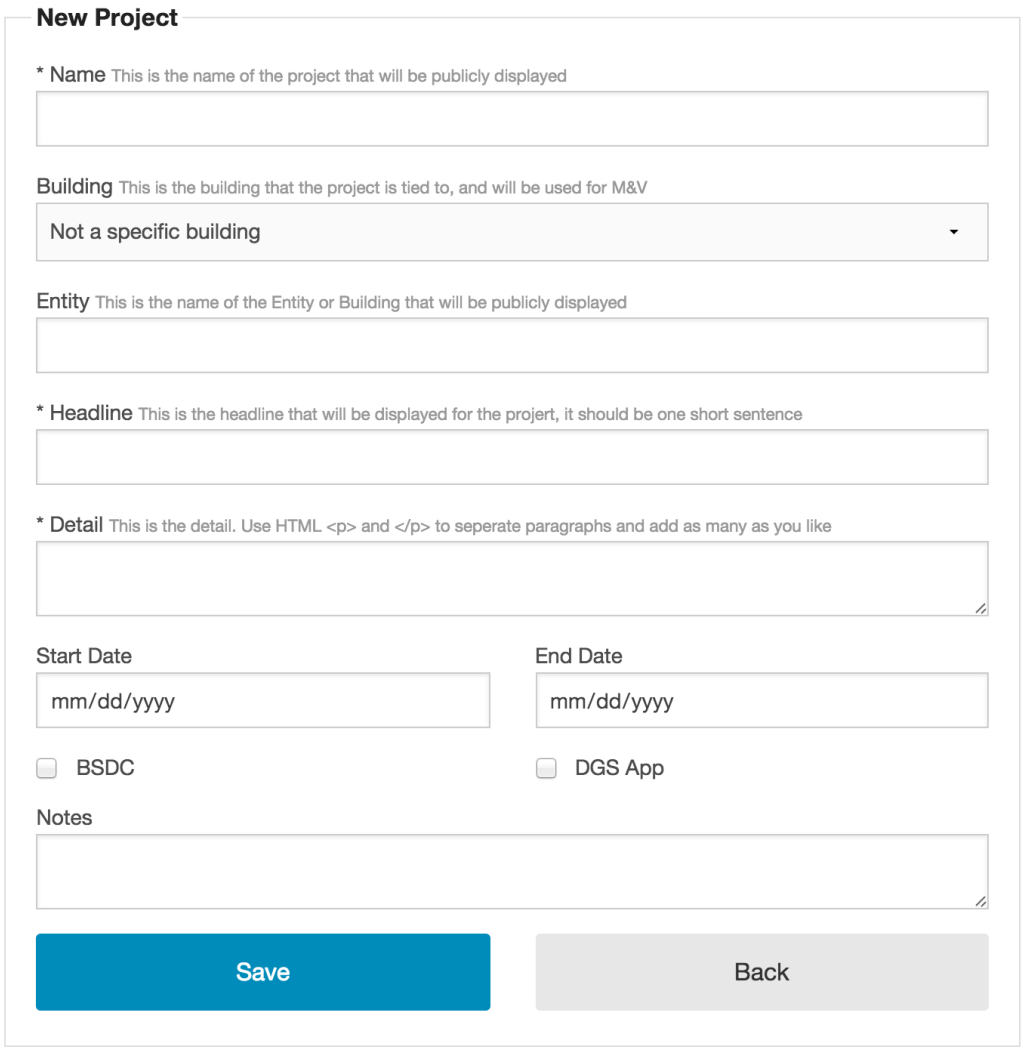
[ ] Send a download link

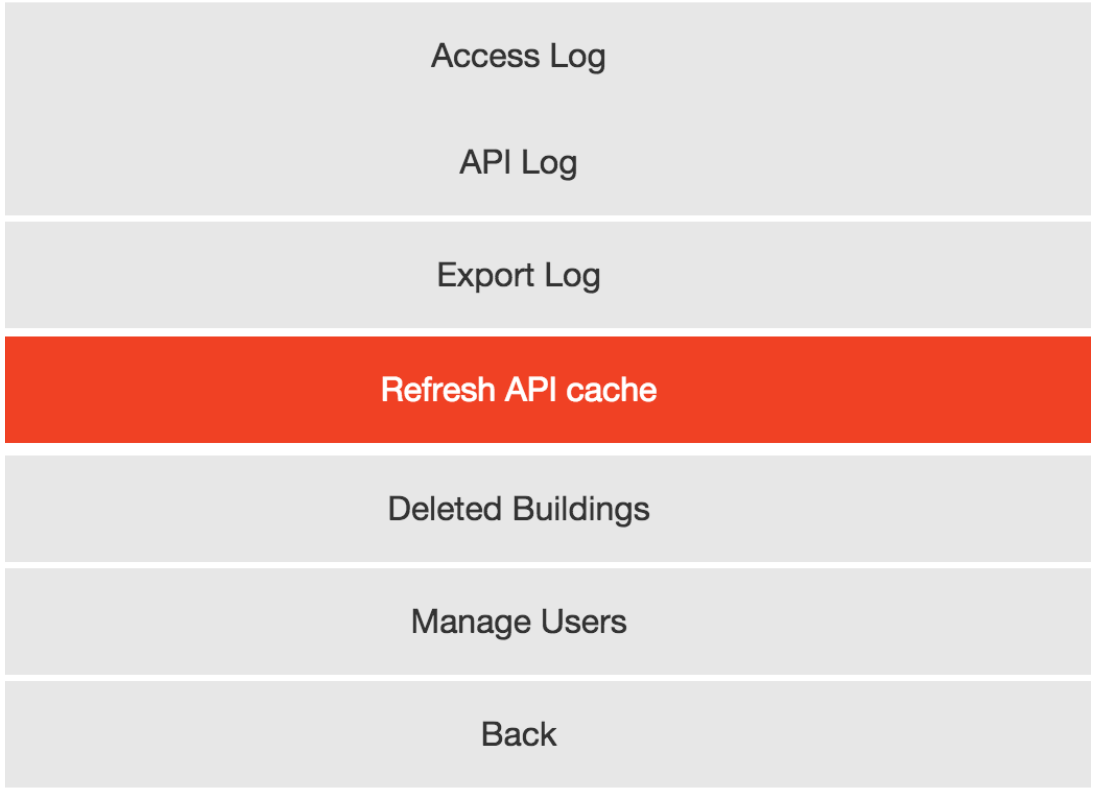
Report name

Email

Generate report

Site Overview: Admin Tools 2





What Data Gets Mashed Up?

Interval	*Pepco's Green Button Electricity Interval Data is the foundation. Additional interval sources (Natural Gas, Building Automation) are being piloted.*
Billing	*Electronic Utility Billing is provided by Washington Gas and DC Water. Pepco is still sending the District paper bills!*
External Analyses	*BuildSmart DC transmits data via API to multiple third parties, including two-way communication with the EPA's Energy Star Portfolio Manager.*
Building	*DGS-SE works across the District government to collect and maintain up-to-date information on buildings including occupancy rates and hours.*
Project	*DGS-SE collects project information to enhance building data and track project effectiveness.*
Temperature	*BuildSmart DC collects temperature data from the national weather service and directly from temperature sensors on site at some facilities.*

…And Who Uses It?

Operations Engineers / FMs

- Check Load Curves
- Manage Equipment Schedules
- Impact Utility, O&M, and Capital Costs

Energy & Sustainability Division

- Maintains Portfolio Data
- Creates and Tracks Projects
- Engages and Trains other Divisions
- Generates Budget and Forecast Reports
- Manages Supply

Efficiency Experts / Analytics

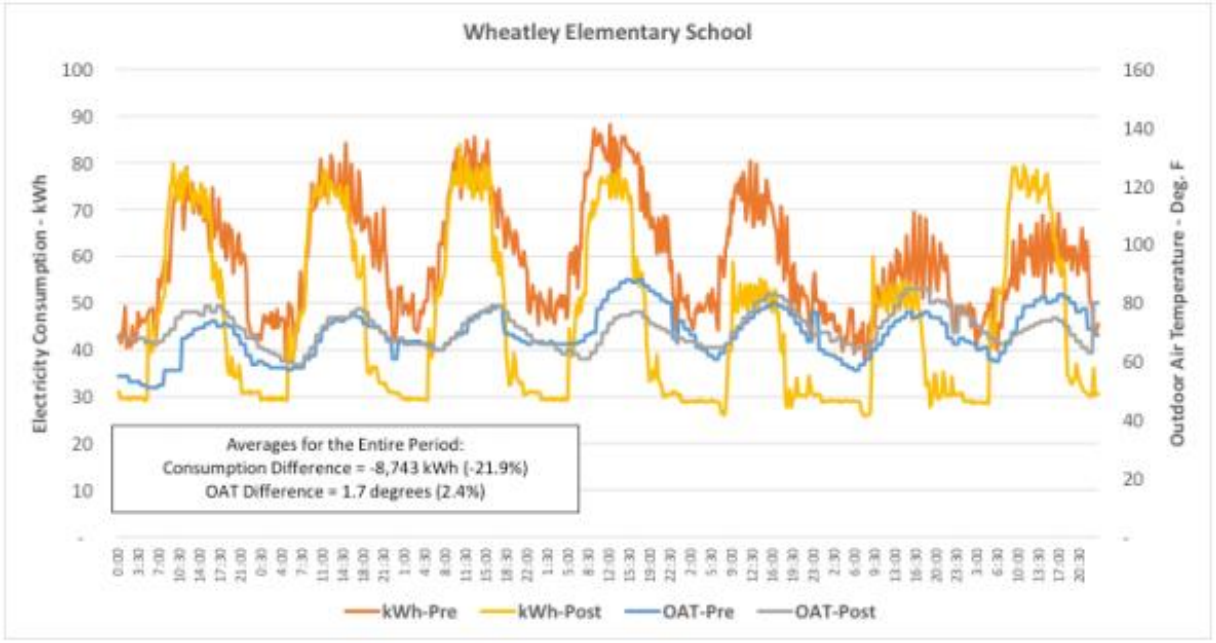
- Access Data via API and Export Tools
- Track Projects
- Recommend Improvements

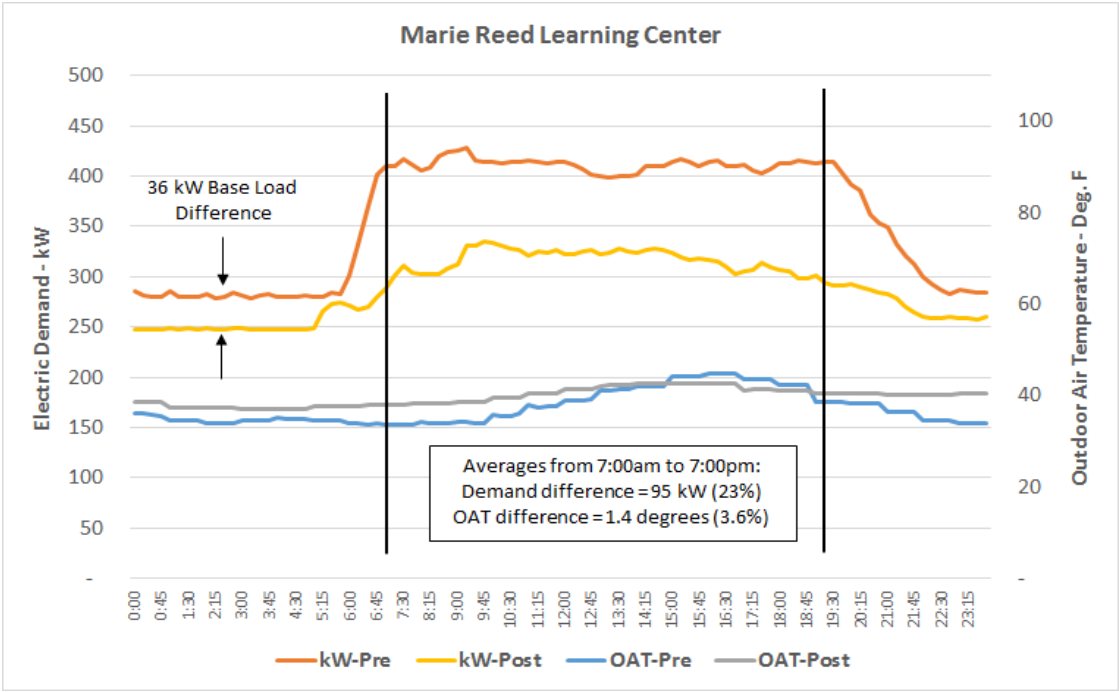
The Public

- Checks Facility Performance
- Uses Data for Research
- Keeps DC Accountable

Progress Tracking & Goal Setting

- Project M&V is currently being built out as follows:





Anomaly Detection

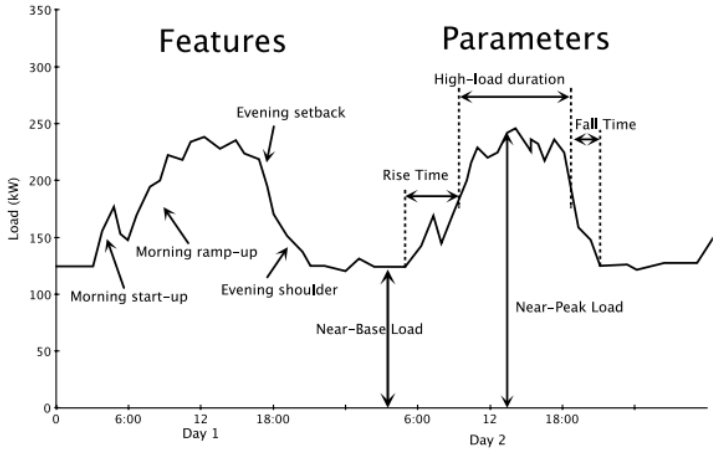
- Interval Data – Automated Quality Control (live)

Search: 225 Virginia

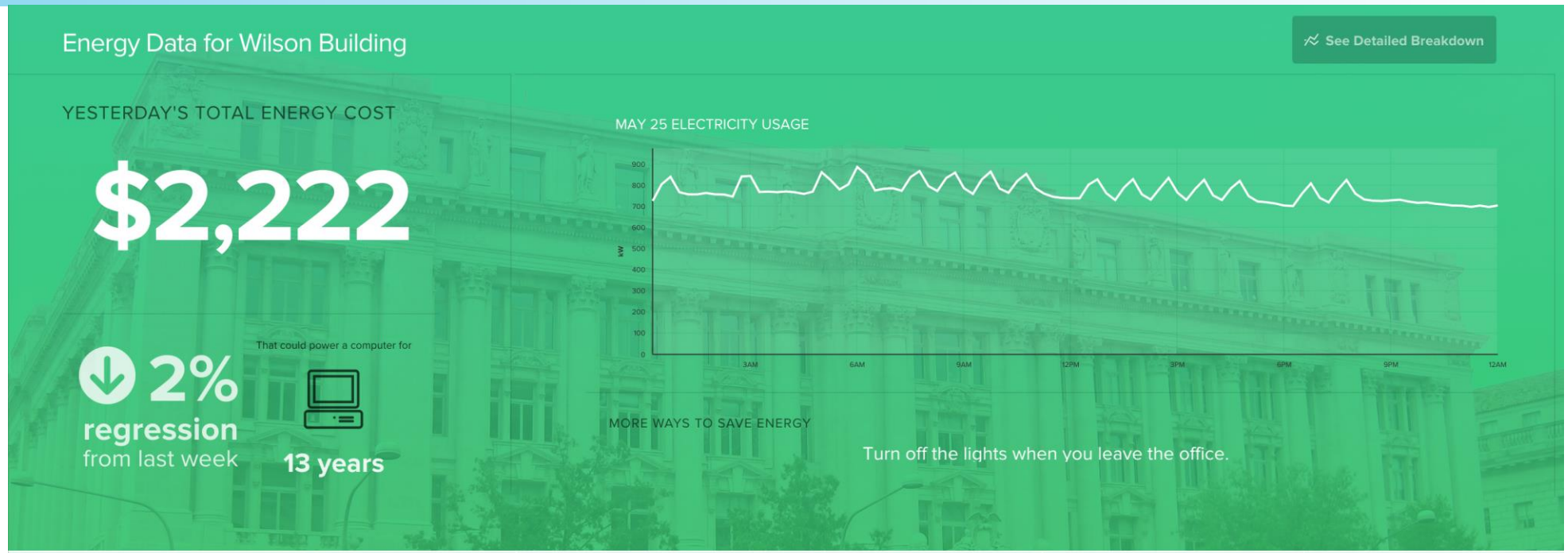
Show / hide columns | Copy | CSV | PDF | Print

Billing Account	Interval Account	Billing Name	Billing Address	Interval Field	Master Name	Master Address	Master ID	Start Date	End Date	Last 12 Months Billing kWh	Last 12 Months Interval kWh	Not Zero-Adjusted Variance	Zero-Adjusted Variance
55015957578	0116209511	200 I St SE	200 I St SE	225 Virginia Av SE	200 I Street Municipal Building	200 I STREET NE	7	1/14	1/15	83673.00	83422.29	1.00	1.00
55015957958	0116209610	200 I St SE	200 I St SE	225 VIRGINIA AVE. S.E.#T1	200 I Street Municipal Building	200 I STREET NE	7	1/14	1/15	392084.00	391646.66	1.00	1.00
55016692315	0132878117	200 I St SE	200 I St SE	225 Virginia Ave SE #sb1	200 I Street Municipal Building	200 I STREET NE	7	1/14	1/15	2243700.00	2323931.05	0.97	0.97
55016692661	0132878216	200 I St SE	200 I St SE	225 VIRGINIA AVE SE	200 I Street Municipal Building	200 I STREET NE	7	1/14	1/15	1904672.00	2476520.77	0.77	0.77

- Load Curve Analysis (under development)



Engaging Occupants Via Kiosks



Alyssa Turner
Deputy Facilities Services Officer
DGS
14 years of service

DC ENERGY HEROES

Alyssa's team is the first line of communication with the agency occupants of DGS-managed municipal buildings. She coordinates building operators and engineers to assure tenants are comfortable and that buildings run efficiently.

Touch to read more about Alyssa

GREEN SCHOOLS CHALLENGE

DGS-SE and DCPS – *Green Schools Challenge: Accepted*
Touch to read more about DGS-SE and DCPS work.

TRANSIT

Federal Triangle

Franconia-Springf'ld	0 MIN
Wiehle-Reston East	3 MIN
Largo Town Center	4 MIN
New Carrollton	7 MIN

Capital Bikeshare

14th & D St NW / Ronald Reagan Building
7 AVAILABLE / 18 DOCKS

See Bus Schedules

WEATHER

78°

Later Today	84°
Tonight	85°
Thu	70 / 88°