



April 29, 2016

Clean Energy Development and Services (CEDs)

## Project Updates from GIS Department

### DMME Selected Properties

DMME selected five properties to be examined on a more detailed level. At this time the GIS Department has examined those properties and roof areas that are flat or appear to be oriented in a south facing direction were drawn with GIS and area calculations have been made.

- The property sheets are available for down load from the CEDs website
- An Excel spreadsheet with those calculated results is also available
- Three of those properties had been previously examined for ground mount PV
- Site visits are being planned and more data needs to be gathered for site characterization

### DGS Community Colleges

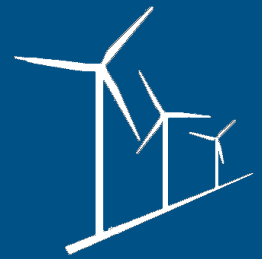
This week the GIS Department has been examining the community colleges throughout the state. County parcels containing the facilities were extracted for acreage calculations and open areas for potential ground mount PV were digitized (drawn in GIS). If kWh values were available for the properties that information was added to the spreadsheet results.

- 45 Community College Properties were examined
- 11 Community Colleges had open areas that could be utilized for ground mount PV.
- Most of the colleges had large acreages but not much open space that was considered un-used.
- Many of the college properties had large areas of forest
- A few of the property parcels could not be identified because county data was lacking ownership attributes
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All the properties had screenshots taken and stored for future use. These properties might be good candidates for roof mounted solar projects in the future  
Property Sheets for the 11 properties with adequate open are will be produced and posted on the website.

### CEDs Website

<https://maps.cise.jmu.edu/public/wind/CEDsmap/>



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### **Challenges with College Data and Dominion COV Data**

Many of these properties had multiple buildings associated with the colleges and several listings in the Dominion COV list of kWh demand. Unfortunately these electric meters did not have individual addresses. For instance a college may have a service address for Dominion and all the meters on that campus are listed under that one service address. Basically the annual demand for each building could not be quantified separately at this time with this data set.

### **Shenandoah Valley GIS User Group Meeting**

I attended this meeting on the 29<sup>th</sup> of April. The user group consists of county GIS professionals, JMU University professors, GIS Vendors, VGIN representatives and other GIS professionals. This meeting is an excellent arena to learn new skills, and make contacts throughout the state.

VGIN gave updates on the availability of LIDAR data for the State of Virginia. Currently about half of the state has been flown with the remaining areas to be completed in the next year or so.

- LIDAR technology will be very useful in the future for extracting building footprints, measuring building heights and determining the orientation of sloped rooftops within a GIS system.
- This technology can assist with identifying rooftops that are suitable for solar PV installation over large areas.

The representative for VGIN, Wendy Stout, agreed to allow CWE access to county data that contains building footprints. This data could be useful in calculating potential roof area for buildings.

Notes to DMME.

Any questions relating to GIS, interactive web maps, and property sheets should be directed to Philip Sturm at: [sturmpv@jmu.edu](mailto:sturmpv@jmu.edu)

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Please let us know if there is additional information you would like added to the property sheets.