

# COMPARISON OF AERIAL IMAGING WITH ONSITE PHYSICAL ANALYSIS FOR SOLAR PV ASSESSMENT



DeJean Elementary School Complex Richmond California  
Oblique Image courtesy of *Pictometry*

## Summary

Case study (2009) compare the accuracy of estimating solar PV potential using advanced imaging algorithms against a physical on site measurement. The project examined 11 building units of various geometries for a school complex in California. Results indicated that aerial imaging methodology is within 2 percent accuracy when compared with on site inspection.

## Methodology

### Physical Onsite Inspection

Source: Inspection team of 4 individuals conducting visual inspection and roof blueprints

Process: Examine each building structure using line of sight measurements. Calculate location of roof sub areas not usable for solar panel installation. Convert measurements into a drawing using CAD/CAM. Allocate solar panels across roof surface drawings.

Time: 1/2 day on site inspection, 2 days for calculations, 2 weeks elapsed time.