

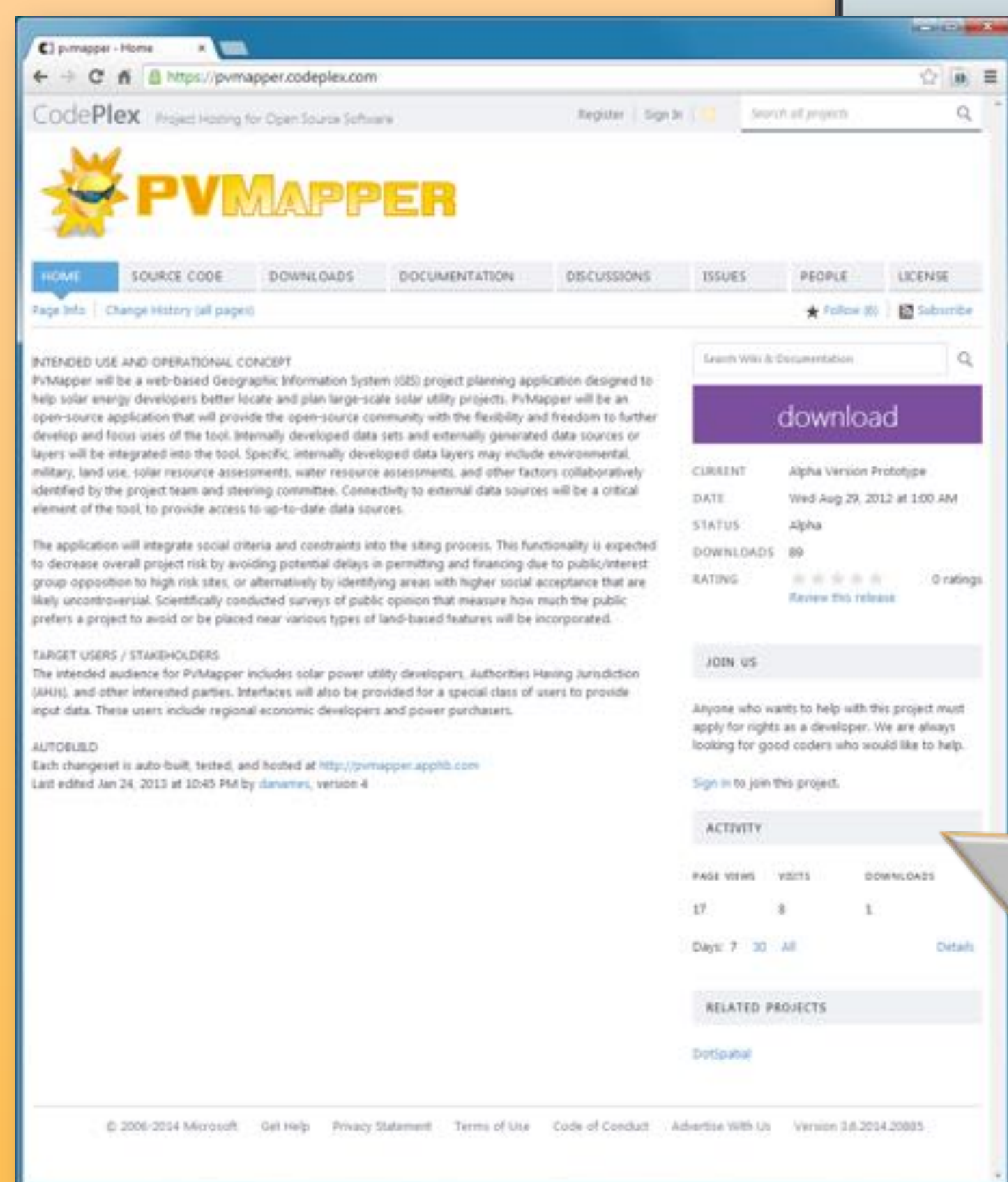
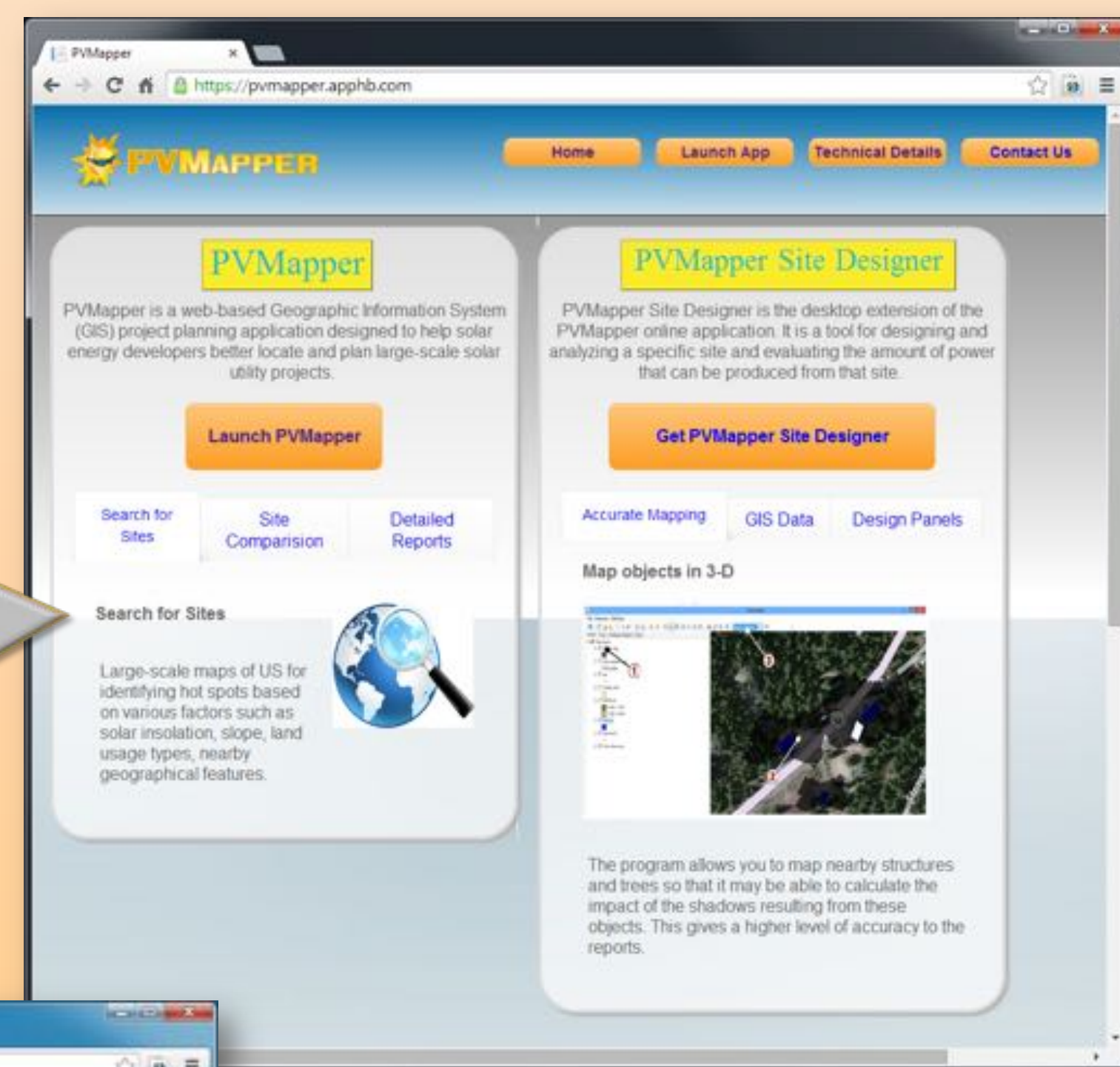
Introduction

PVMapper is an open-source web-based GIS tool used to identify and compare locations for siting utility-scale PV solar facilities. The ultimate goal of PVMapper is to decrease costs associated with project siting by easily comparing alternatives and streamlining the siting process.

Project Objectives

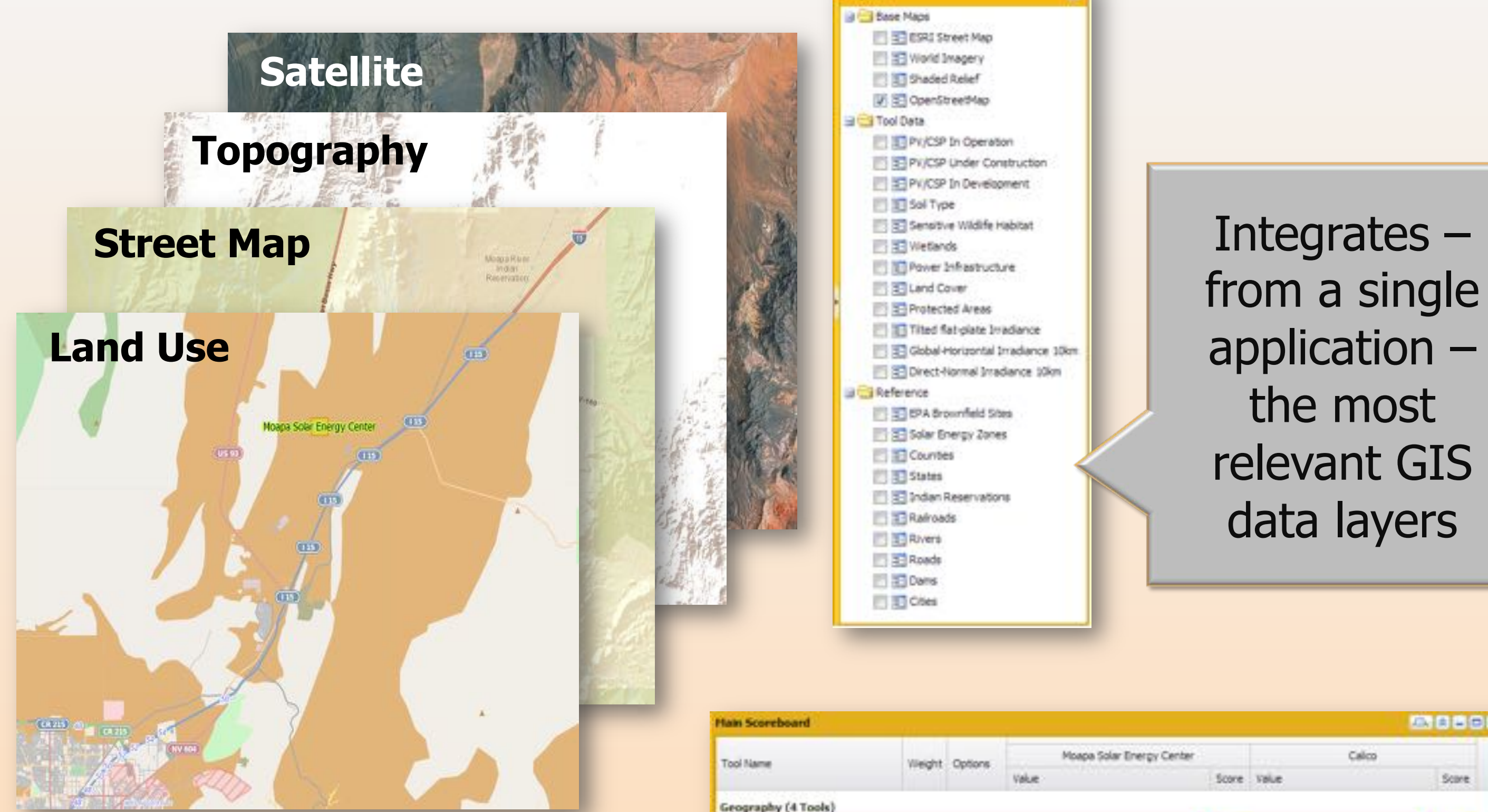
1. Integrate appropriate GIS data layers
2. Include a measure of social risk and public acceptance
3. Enable customization of variable weights
4. Provide a free and accessible platform for download
5. Provide a sustainability plan to ensure future relevance

Web access to PVMapper and Site Designer applications:
PVMapper.org



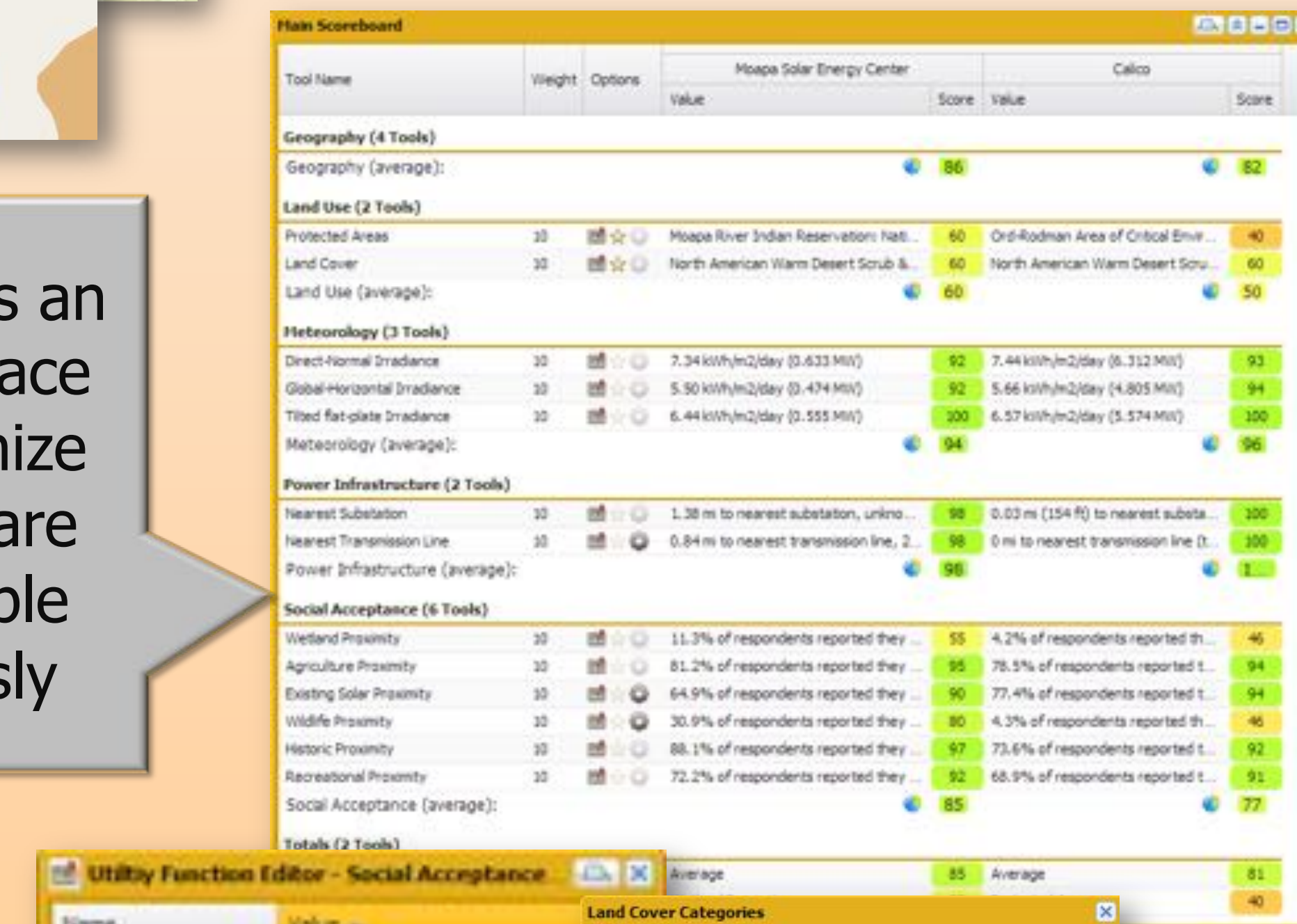
Publicly accessible free source code, issue tracker, discussion forum, and collaboration tools for developers are hosted at:
PVMapper.codeplex.com

PVMapper Capabilities

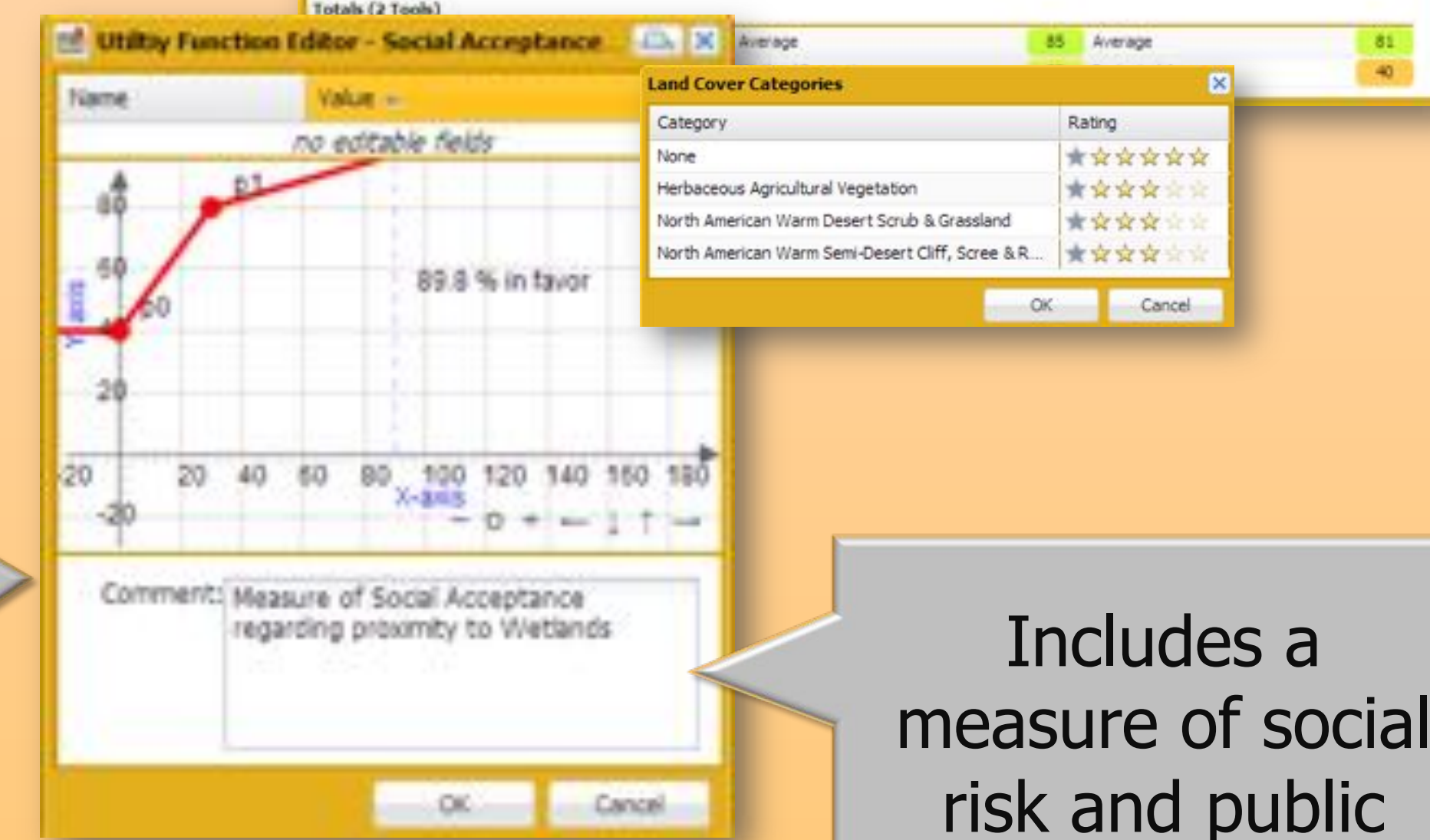


Integrates – from a single application – the most relevant GIS data layers

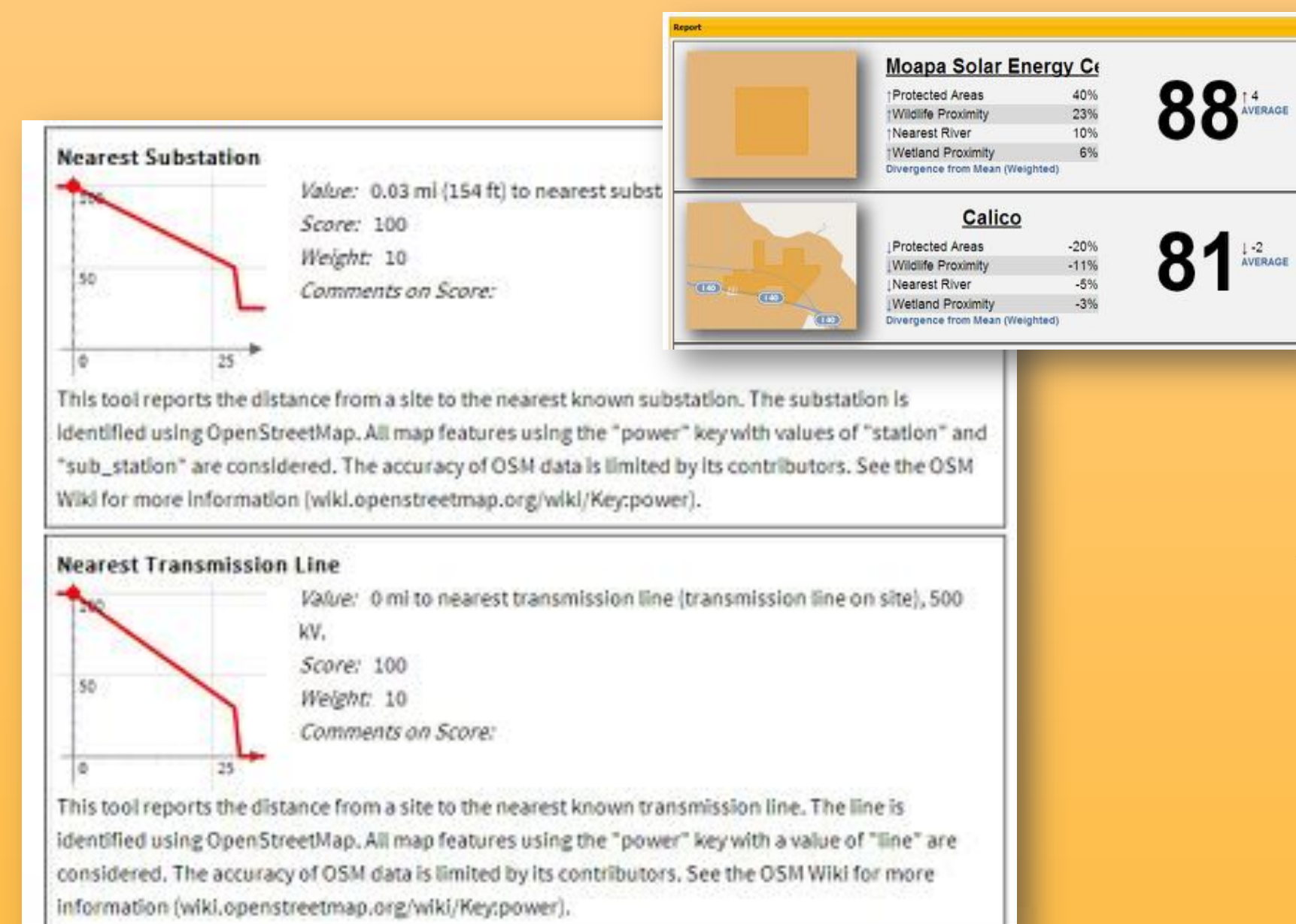
Scoreboard provides an “at-a-glance” interface for users to customize weights and compare attributes of multiple sites simultaneously



User controls algorithms, magnitude and overall effect each variable has on siting analysis



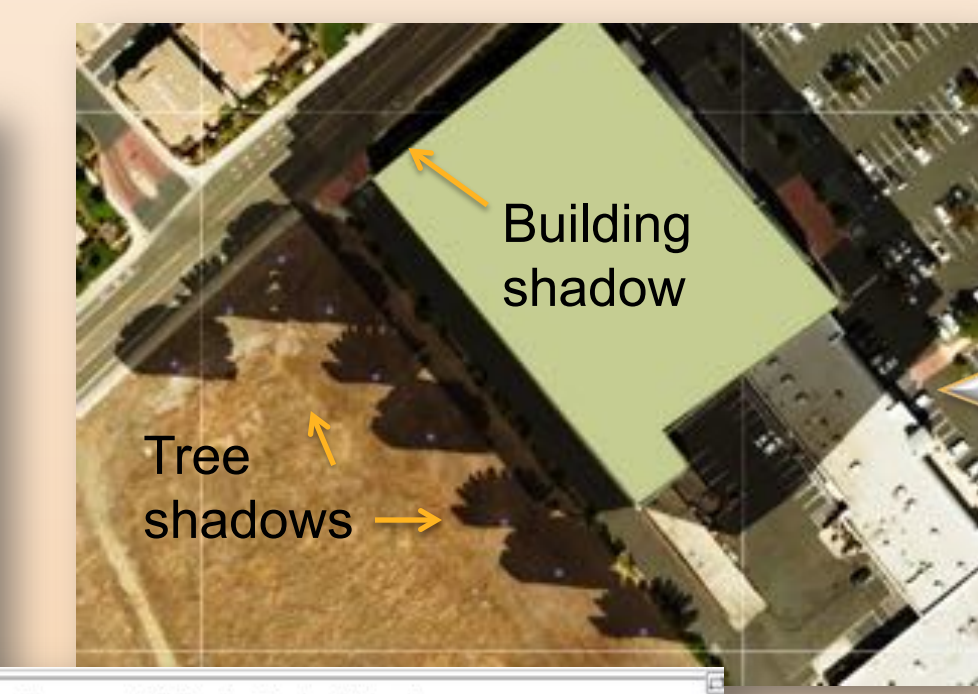
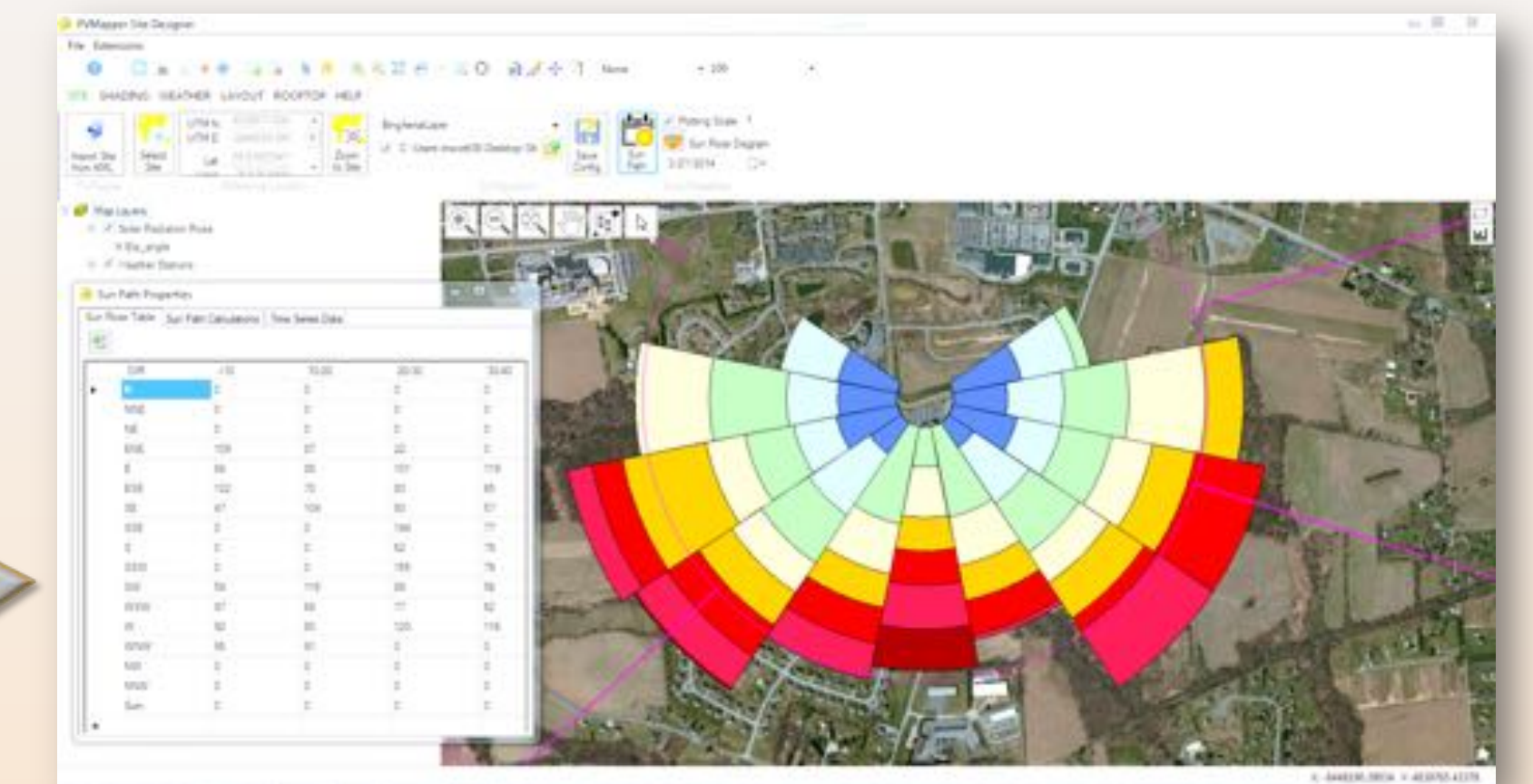
Includes a measure of social risk and public acceptance



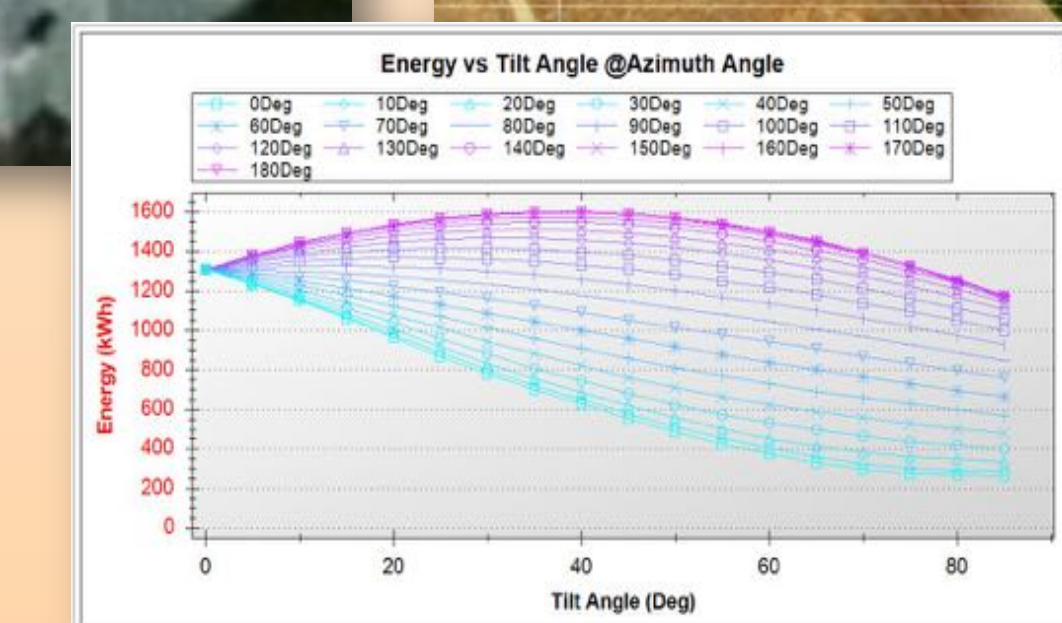
Provides summary and detailed reports of site screening analysis

Site Designer Capabilities

- Calculates Solar Insolation
- Designs PV System Layout
- Calculates potential power production



Determines location of shadows



Interfaces with SAM and PVWatts

Sustainability

1. Creation of an User-Advisory Board
2. Development of protocols for future software updates
3. Hosting PVMapper on BYU servers
4. Continuous recruitment of project partners

Project sustainability efforts are demonstrated by involvement from four industry associations and over thirty PV-related for-profit companies in project decision-making.

Results and Conclusions

PVMapper provides site screening and analysis at dual scales. Benefits include:

- Reduces the time required to screen potential sites for interconnection studies
- Reduces the number of interconnection studies required for final site selection
- Reduces risks associated with permitting
- Success stories from Terracon Consultants, Aspen Environmental Group, and the National Rural Electric Cooperative Association