SSAFE CASE STUDY REPORT

RoseVilla Tree Canopy Assessment Method

Chapter: RoseVilla
Location: Portland, Oregon
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Keywords: Tree canopy Assessment

Summary:
The Green Team, Resident Council and Administration met in 2017 to discuss RoseVilla's tree canopy.

Objectives:

- **#1 –** Identify the percentage of RoseVilla tree canopy.
- **#2 –** Provide annual tree canopy reports.

Project Description:
This project uses public online iTree canopy software to generate annual reports that track RoseVilla's tree canopy.

RoseVilla is a resident driven, non-profit, life plan community located on 26-acres above the Willamette River in Portland, Oregon. The population includes 380 independent living, and 32 assisted living residents residing in Cottages, Pocket Neighborhoods and Multi-story apartments.

The tree canopy project's process can be used in urban and rural areas, with less applicability to inner city high-rise. Software reports include carbon sequestration, air quality and hydrology benefits of tree canopy.

Methodology (Activities, Steps):

- Learn how iTree Canopy works. (See attached PDF instructions.)
- Identify property area to monitor. Set project boundaries.
- Determine cover class (e.g. trees, shrubs, soil, impervious roofs, roads and walks.)

- Use 50 square feet per data point to achieve desired standard error (+/-1%).
- Generate sufficient iTree data points to achieve the standard error.
- Save iTree canopy software data files. Export canopy reports to PDF and save.
- Walk the project area to verify identification of cover class categories.
- Prepare the annual report.

Funding Needed (Amount, Sources):
There is no funding needed for this project undertaken by resident volunteers.

Involvement or Support of Community Administration:
The Green Team, Resident Council, Director of Facilities, Grounds Manager, senior administrators and residents met in 2017 to discuss RoseVilla tree canopy. No staff time has been required to use iTree for this project.

Key Challenges:
- Google reduced the frequency of satellite map updates.
- Shadows obscure ground level data if satellites are not directly overhead.

Outcome (Results):
The iTree software can provide reliable repeatable survey data for year-to-year comparison.

Lessons Learned:
Sufficient data points to achieve the standard error of plus or minus one percent is sufficient for reliable year-to-year comparison.

Benefits of Use:

- Sharing this data with your campus Green Team is valuable so they can confidently speak to canopy goals and progress.
- The data can be applied to proposed building or development sites to model how projects would impact the tree canopy, grounding decisions in measurable evidence.
- It supports long-term tracking of landscape changes, such as lawn-to-meadow conversions, to assess how projects evolve over time.
- Save and reuse the same file to maintain consistent data points across years.
- This is a strong sustainability planning tool for establishing baseline conditions and goals, including impervious surface area and existing grass cover.
- The data can also be used to identify priority locations for future tree planting

Next Steps or Follow Up:
Continue using iTree software.

Resources:

- iTree Tools

Attached: iTree instruction PDF.